

# PSYCHOLOGICAL ABSTRACTS

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## CONTENTS

|   |           |
|---|-----------|
| General.....                            | 4645-4669 |
| Sensation and Perception.....           | 4670-4687 |
| Feeling and Emotion.....                | 4688-4693 |
| Attention, Memory and Thought.....      | 4694-4701 |
| Nervous System.....                     | 4702-4717 |
| Motor Phenomena and Action.....         | 4718-4746 |
| Plant and Animal Behavior.....          | 4747-4757 |
| Evolution and Heredity.....             | 4758-4762 |
| Special Mental Conditions.....          | 4763-4802 |
| Nervous and Mental Disorders.....       | 4803-4875 |
| Social Functions of the Individual..... | 4876-4954 |
| Industrial and Personnel Problems.....  | 4955-4966 |
| Childhood and Adolescence.....          | 4967-5009 |
| Educational Psychology.....             | 5010-5044 |
| Biometry and Statistics.....            | 5045-5052 |
| Mental Tests.....                       | 5053-5066 |

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# AUTHOR INDEX

- Abély, P., 4804  
Abernethy, M., 4743  
Abramson, J., 4967, 4978  
Alajouanine, T., 4803  
Aldrich, C. R., 4876  
Allendy, —, 4877  
Allers, R., 4763, 4805, 4968  
Allevi, G., 4764  
Allport, F. H., 4878  
Anderson, E., 4879  
Anderson, J. E., 4969  
[Anon.], 4645, 4646, 4765, 4766, 4767, 4768, 4769, 4806, 4807, 5010  
Aptekar, H., 4880  
Aretz, C. W., 4685  
Artom, C., 4881  
Aschaffenburg, G., 4882  
Atkinson, C., 5011  
Aveling, F., 4770  
  
Babcock, M., 4878  
Bachelard, P. M., 4808  
Badonnel, —, 4809  
Bainbridge, F. A., 4718  
Baldwin, F. M., 4743  
Barker, M., 5012  
Barker, R. H., 4970  
Barnard, R. D., 4750  
Barre, A., 4702  
Baruk, H., 4810  
Baudouin, C., 4811  
Baur, E., 4758  
Beaman, G. B., Jr., 4703  
Beane, J. C., 4883  
Becker, H., 4884  
Beckley, A. L., 4771  
Bellerby, J. R., 4885  
Benedict, R., 4886  
Bénon, R., 4772, 4812  
Bernard, L. L., 4887  
Betgilel, L., 4773, 4888  
Bezdard, —, 5013  
Blen, E., 4774  
Birnbaum, K., 4889  
Bishop, G. H., 4704  
Bleuler, E., 4775  
Bleuler, M., 4813  
Blondel, A., 4647  
Bock, A. V., 4718  
Bodenhafer, W. B., 4890  
Boettiger, —, 4814  
Bodrin, M., 4759  
Bodryeff, T. W., 4891  
Borgeson, F. C., 5014, 5015  
Rose, J. C., 4747  
Bouthoul, G., 4892  
Bray, C. W., 4757  
Brewer, J. M., 5016, 5017, 5018  
Brill, A. A., 4815  
Brooks, C. M., 4705  
Brown, L. G., 4893  
Brownell, W. A., 5010  
Brunner, O., 4816  
Buerger-Prinz, H., 4817, 4818  
Bühler, C., 4971  
Bührlig, W., 4894  
Burnett, G. V., 4955  
Boyendijk, F. J. J., 4719  
  
Callilet, E., 4776  
Cambriels, —, 4819  
Cannon, W. B., 4720  
Carlson, H. A., 4686  
Carpenter, N., 4895, 4896  
Carver, H. C., 5045  
Cason, H., 5020  
Castle, E. S., 4748  
Cederstrom, J. A., 5021  
Chavigny, —, 4688  
Cherau, G., 4694  
Childs, J. L., 5022  
Clark, J., 5023  
Cobb, S., 4754  
Cohen, M. R., 4648  
Cornwin, R. N., 4649  
Courtols, A., 4820, 4822  
Crock, M. N., 4695  
  
De la Valsière, J., 4777  
Delmas, A., 4899  
Dembo, T., 4690  
De Plauzoles, S., 4821  
De Quay, —, 4956  
De Saussure, R., 4900  
Deschamps, A., 4845  
Dexter, E. W. A., 4901  
Dewey, J., 4650  
D'Héucqueville, G., 4809  
Diedler, J., 5024  
Dietz, —, 4670  
Diez Gasca, M., 4957  
Dill, D. B., 4718, 4725, 4779  
Dobak, G., 4657  
Dobbs, H. A., 4902  
Dodge, R., 4721, 4778  
Dobrovitch, W., 4722, 4779  
Drabs, —, 4744  
Dreiser, T., 4631  
Droba, D. D., 5053  
Dubecq, —, 4671  
Dubineau, J., 4852  
Dubreuil, G., 4672, 4673, 4674  
Dufour, M., 4675  
Dugas, L., 5025  
Dupouy, R., 4822, 4823, 4824  
Dusser de Barenne, J. G., 4723  
Duthil, R., 5026  
Dwelschauvers, 4724  
  
Edwards, H. T., 4725, 4735  
Eerelman, J., 4719  
Ehlinger, G., 4958  
Endres, F. C., 4780  
Enke, W., 4825  
Ey, H., 4838  
Eyrich, M., 4903  
  
Faris, E., 4904  
Fischer, E., 4758  
Fontagné, J., 5027  
Forster, E., 4781  
Fossler, H. R., 4715  
Fowler, H. L., 5028  
Fox, J. C., 4721  
Frain, H. L., 4959  
Frank B., 4905  
Frank J., 4906  
Freeman, G. L., 4726  
Frels, R., 4973  
Fretwell, E. K., 5029  
Freud, A., 4974  
Fricks, J., 5054  
Furukawa, T., 4782  
  
Galvani, L., 5046  
Garrison, K. C., 4907  
Gemelli, A., 4960  
Gesell, A., 4975  
Giannitrapani, A., 4908  
Gibault, J., 4749  
Gilon, A. S., 4706  
Ginestous, E., 4676  
Glover, E., 4783  
Goltein, P. L., 4909  
Good, C. V., 5030  
Goodenough, F. L., 4976  
Grimbaum, A. A., 4727  
Groves, E. R., 4910  
Groves, G. H., 4910  
Guilford, J. P., 4911  
Guillaume, J., 4742  
  
Haenszel, W. M., 4896  
Hamby, W. D., 4912  
Hankins, F. H., 4913  
Hanske, F. L., 5031  
Harden, L., 4695  
Harker, E., 4743  
Harrower, M. R., 4680  
Hartmann, G. W., 5032  
Hawks, J. J., 5033  
Hayercraft, G. F., 4728  
Heerwagen, W., 4826  
Heldbreder, E., 5055  
Heldgren, M. F., 4750  
Heinbecker, P., 4704  
Hellwig, A., 4784  
Hendrick, I., 4785  
Hennard, A., 4827  
Heuyer, G., 4977, 4978  
Hoffmann, H., 4828, 4829  
Hoffmann-Krayer, E., 4914  
  
Hofstätter, R., 4830  
Hollingworth, L., 5056  
Hooker, D., 4751  
Höpler, E., 4915  
Huber, E., 4729  
Huizinga, E., 4752  
Hummer, E., 4696  
Hurd, A. W., 5034  
Hutchins, F. F., 4831  
Huxtable, Z., 4743  
  
Imms, A. D., 4753  
Ingram, W. R., 4714  
Institute for Juvenile Research, 4916  
Isaacs, S., 5035  
Jacobi, W., 4832  
Jankelevitch, V., 4652  
Jasper, H. H., 4653  
Jones, E. S., 5057  
Jones, H. E., 4979, 5058  
Jones, M. C., 4980  
Jones, V., 4981  
Josephson, E. M., 4677  
Judenitsch, N. A., 4716, 4717  
Kahn, E., 4778  
Kaila, M., 4818  
Kaltenbach, H., 4917  
Kanner, L., 4689  
Kappes, M., 5059  
Katz, D., 4878  
Kernbach, M., 4870  
Kestner, O., 4678  
Klimms, C. W., 4982  
King, C. E., 4730  
Klüver, H., 4983  
Koch, C. C., 4679  
Koffka, K., 4680  
Krauss, R., 4654  
Kretschmer, E., 4786, 4984  
Kroeber, A. L., 4918  
Kuna, H., 4787  
Kupat, P. S., 4731  
Kuroda, R., 4655, 4656  
  
Lahy, J. M., 4901  
Lajta, A., 4657  
Lange, J., 4833  
Langelsuedde, A., 4834  
Langner, H. P., 4835  
Langworthy, O. R., 4707  
Lenz, F., 4758  
Leon, P., 4919  
Leonhardt, C., 4697, 4698  
Lepeschkin, W. W., 4788  
Leroy, —, 4836  
Lesch, E., 4657  
Leslie, F. E., 4837  
Lévy-Bruhl, L., 4920  
Levy-Vassal, J., 4838  
Levin, K., 4690, 4985  
Lhermitte, J., 4789  
Lincoln, M. E., 5017, 5018  
Lindemann, E., 4708, 4790  
Linder, F. E., 4793  
Line, W., 4658, 4986  
Loosli-Usteri, M., 4987  
Lorand, A., 4791  
Lorber, A., 4988  
Lotmar, F., 4830  
Loudot, O., 4840  
Louttit, C. M., 4659, 4921  
Low, A. A., 4841  
Lowman, J., 4735  
Lukov, B. N., 4731  
Luxemburger, H., 4760, 4922  
Lyman, R. S., 4731  
  
Maday, S., 4657  
Mager, H., 4792  
Malamud, W., 4793  
Mandeville, A., 4794  
Mangun, V. L., 5036  
Mann, M., 4907  
Manuel, H. T., 4943  
Mareschal, P., 4820  
Marshall, H., 4989  
Masaki, M., 4795  
Masson-Oursel, P., 4732  
McCallister, W. J., 5037  
McCarthy, D., 4990  
McCormick, M. J., 4923  
McCulloch, O. L., 4681  
McCullough, R. S., 4924  
McElwee, E. W., 4901  
  
Mead, M., 4992  
Medakovich, —, 4836  
Meili, R., 4993  
Meltzer, H., 4699  
Mendenhall, R. M., 5051  
Metalnikov, S., 4733  
Metcalf, J. T., 4925  
Mills, C. A., 4796  
Moehlig, R. C., 4842  
Moldovan, M., 4700  
Monaghan, B. R., 4709  
Monbrun, —, 4710  
Mond, R., 4734  
Monier, —, 4836  
Monnier, A., 4711  
Monnier, A. M., 4711  
Moore, H., 5060  
Morrison, C. A., 4660  
Morselli, E., 4927  
Muckermann, H., 4928  
Muggia, A., 4994  
Murchison, C., [Ed.], 4995  
Myers, G., 4843  
Myerson, A., 4735  
  
Néron, M., 4977  
Netter, H., 4734, 4730  
Neumann, J., 4844, 4929  
Nichols, M. L., 5038  
Nicoglou, —, 4712  
Niggli-Hürlimann, B., 4996  
Noffsinger, F. R., 5030  
  
Oddone, A., 4737  
Odum, H. W., 4930  
Ohmsted, G., 4997  
Older, E., 4955  
Orangio-Ruiz, V., 5061  
Ou-Ni-Lin, Mme., 5062  
  
Pagot, C., 5039  
Palkin, M. L., 4797  
Papillault, G., 4931  
Park, R. E., 4932  
Parker, S., 4682  
Pascal, C., 4845, 4846  
Passek, V., 4804  
Patten, C. A., 4847  
Peak, H., 4738  
Peters, C. C., 5047, 5048  
Peterson, J., 4998  
Pétron, A., 4848  
Petri, O., 4661, 4798  
Phelps, W. L., 4799  
Piaget, J., 4999  
Pichard, H., 4823, 4824  
Pintner, R., 4849  
Price, M. T., 4933  
Prost, P., 4739  
  
Quercy, P., 4850  
Quinan, C., 4934  
  
Raines, L., 4691, 4692  
Randolph, V., 4935  
Ranson, S. W., 4713, 4714  
Rapeur, L. W., 5040  
Raubenheimer, A. S., 4743  
Reid, L. A., 4930  
Remmers, H. H., 5041  
Révész, B., 4851  
Reynolds, C. N., 4937  
Richards, T. K., 4725  
Richt, C. J., 4852  
Richter, C. P., 4707  
Rifat, A., 4853  
Rignano, E., 4662  
Robinson, E. S., 4938  
Rodrigues, G., 4740  
Roger, J., 4804  
Rorty, M. C., 5049  
Ross, L. F., 4854  
Roubnovitch, J., 4962  
Roudinesco, M., 4977  
Rudin, —, 4939  
Ruscheva, S., 4800  
  
Sagl, F., 4657  
Scates, D. E., 5050  
Schacht, E., 4855  
Schaltenbrand, G., 4754  
Schenk, A., 4856  
Schilder, P., 4682, 4857  
Schmideberg, M., 4858  
Schmitt, F. O., 4709  
Schreider, —, 4963  
Schubert, G., 4741  
Schulte-Vaering, H., 4801  
  
Schwartz, A., 4742  
Seague, M. V., 5000  
Senior, F. A., 4796  
Sérége, H., 4859  
Sergi, G., 4603  
Serin, —, 5001  
Severance, H. O., 4940  
Seymour, W. Y., 4860  
Shaffer, W., 4964  
Shohl, S. T., 4664  
Slig-Boeddinghaus, M., 4861  
Sighele, S., 4941  
Simon, T., 5063  
Smull, M. L., 4743  
Snyder, M. A., 5002  
Sollier, —, 4744  
Sondón, T., 4862  
Specklin, P., 4942  
Stepowska, —, 4683  
Stevens, N. C., 4863  
Stols, A., 4943  
Strachey, J., 4864  
Strang, R., 5042  
Stretch, L. B., 5019  
Sullivan, E. T., 4944  
Sullivan, E. A., 4865  
Surber, P., 4745  
Swanson, C. G., 5044  
Swift, E. J., 4665  
Sylvus, N., 4945  
Sylvus, N., 4945  
Syrkin, —, 4746  
Szondi, L., 4657  
  
Tarozzi, G., 4666  
Telkes, M., 4755  
Terman, L. M., 5003  
Thomas, A., 4866  
Thouless, R. H., 4693  
Thurstone, L. L., 4802, 4946, 4965  
Tibbitts, C., 4947  
Tinel, J., 4867  
Tinker, M. A., 5064  
Todd, T. W., 5004  
Tournay, A., 4684  
Travis, L. E., 4715  
Travis, R. C., 4721  
Triantophyllou, D., 4863  
Tripp, E., 4948  
Trow, W. C., 5043  
Trubert, E., 4869  
Trunk, H., 4949  
Tumilra, O., 5005  
  
Urechia, C. I., 4870, 4871  
  
Valette, M., 4672, 4673, 4674  
Van der Hoop, J. H., 4872  
Vié, J., 4846  
Von Hentig, H., 4950  
Von Verschuer, O., 4761  
  
Wade, F. A., 4685  
Waldman, J. L., 4685  
Walker, R. Y., 4653  
Wallin, J. E. W., 5065  
Wallon, H., 5006  
Walther, L., 4966  
Wangsten, O. H., 4686  
Warner, L. H., 4756  
Warren, H. C., 4667  
Warren, R., 5051  
Waterman, T. T., 4918  
Watts, R. E., 4951  
Webb, R., 4743  
Wellman, B., 5007  
Wertham, F., 4873, 4874  
Wever, E. G., 4757  
White, W. A., 4668  
Whitney, F. L., 5044  
Wicknell, S. D., 5052  
Wiedling, H., 5008  
Wilson, D. L., 4669  
Wilson, F. T., 4701  
Wilson, P. T., 4762  
Wires, E. M., 5066  
Woodard, J. W., 4952  
Woolley, H. T., 5009  
Woronow, D. S., 4716, 4717  
Wykes, E. C., 5047, 5048  
  
Yoshida, S., 4687  
Yoshimasu, S., 4953  
Young, K., 4954  
  
Zaborowski, —, 4875

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## GENERAL

4645. [Anon.] **The psychological laboratory in the State University of Iowa.** *Univ. Iowa Stud.: Ser. Aims & Prog. Res.*, 1931, No. 34. Pp. 15.—A brief description of the laboratory and collateral units is given, with three photographs and five diagrams of the laboratory floor space.—*C. C. Neet* (Clark).
4646. [Anon.] **Proceedings. Dinner in honor of Professor Freud.** *Psychoanal. Rev.*, 1931, 18, 329.—*D. Shakow* (Worcester State Hospital).
4647. **Blondel, A. Sur les limitations de la photométrie.** (On the limitations of photometry.) *C. r. Acad. sci.*, 1931, 192, 782-786.—The author endeavors to remove the confusion existing between photometry, physiological optics, and experimental psychology. Photometry includes all phenomena measuring the flow of light by unity of surface. It is independent of the eye, since the latter can be replaced by a photometer utilizing a photo-electric or thermoelectric pile. Physiological optics concerns the properties of the retina, the nerves and the optic centers which determine the threshold of sensation, differential sensitivity, persistence, etc. The photometric unities indicate only those circumstances which produce measured sensations. In experimental psychology there is always involved a judgment by the intellectual centers in every definition of phenomenon studied. By means of certain examples, i.e., phenomena of apparent duration of momentary lights, the apparent brilliancy of stars, the dazzling light of flares, etc., the author illustrates wherein these questions involve photometry, physiological optics, and psychophysical or experimental psychology.—*Math. H. Piéron* (Sorbonne).
4648. **Cohen, M. R. Reason and nature.** London: Kegan Paul, 1931. Pp. xxiv + 470. 21/.—The author deals, in a somewhat philosophical manner, with various forms of modern revolt against "reason," and with the various replies that can be made in the fields of natural and social science. The argument is marshalled under three heads: reason and the nature of things; reason in natural science; and reason in social science. A brief characterization of the author's view is that he upholds the function of reason as an aid to or even a foundation of vision. Many psychological problems are discussed, particularly those that center about whether or not psychology may be treated as a natural science.—*F. C. Bartlett* (Cambridge, England).
4649. **Cornwin, R. N. Psychology to the general.** *Atl. Mo.*, 1931, 148, 64-73.—A protest by a layman against the quackery that is prevalent in popularized education, vocational and scholastic testing and prognosis, psychoanalysis, and behaviorism. Recommends "a wisely chosen commission (of laymen or ultimate consumers) to prepare a handbook which will enable a layman of average common sense to recognize on sight a real honest-to-goodness psychologist and which might save him from being victimized by any and every one who has learned to lisp the latest psychological shibboleths."—*O. L. Harvey* (Cambridge, Mass.).
4650. **Dewey, J. Philosophy and civilization.** New York: Minton, Balch, 1931. Pp. 341. \$5.00.—(Not seen).
4651. **Dreiser, T. Remarks.** *Psychoanal. Rev.*, 1931, 18, 250.—Remarks made at the seventy-fifth birthday dinner in honor of Freud.—*D. Shakow* (Worcester State Hospital).
4652. **Jankelevitch, V. Bergson.** Paris: Alcan, 1931. Pp. 300. 45 fr.—Instead of confining himself to a simple exposition, the author has tried to recover the genesis and framework by a reconstruction of ideas. His book consists of 5 chapters, in which he discusses (1) the original fact of retrospective illusion, (2) the idea of liberty—method, duration, freedom, (3) the mind and the body—thought and the brain, recollection and perception, intellection, memory and matter, (4) life: finality, instinct and intelligence, matter and life, (5) the birth of concepts and the fulness of the spirit (creation and organization of the possible). The author has laid special emphasis on the critical interpretation of the ideas of matter. He has aimed not so much to explain Bergsonism as to make it comprehensible. Numerous bibliographical footnotes.—*Math. H. Piéron* (Sorbonne).
4653. **Jasper, H. H., & Walker, R. Y. The Iowa eye-movement camera.** *Science*, 1931, 74, 291-294.—Using the corneal reflection method of eye photography, this camera obtains simultaneous binocular records of both vertical and horizontal movements. It is readily adaptable to various types of eye-movement problems other than reading. A diagram showing the assembly of camera and light source, focusing mechanism detail, and film box detail is given. A sample record is shown.—*N. Goldman* (Clark).
4654. **Krauss, R. Bericht über den Kongress der Deutschen psychologischen Gesellschaft in Hamburg vom 12-16. April 1931.** (Report of the Congress of the German Psychological Society, Hamburg, April 12-16, 1931.) *Zentbl. f. Psychotherap.*, 1931, 4, 465-477.—This meeting, directed by Wilhelm Stern, brought together about 900 persons, the largest attendance at any of these Congresses. Reinhard Krauss of Berlin, who reports the proceedings, gives interesting and somewhat extended and critical abstracts of a considerable number of the papers, chiefly on the following subjects: the place of psychology among the other sciences; hunger and appetite; animal psychology; the problem of speech in its more psychological and philosophical aspects, to-

gether with the aphasia problem; child psychology, including experimental methods and children's perception of space; the conception of meaning in psychoanalysis; and the "psychological life curve."—*M. E. Morse* (Catonsville, Md.).

4655. **Kuroda, R.** On a new model of an actograph. *Acta Psychol. Keijo*, 1931, 1, 121-122.—A new actograph designed by the author has its main characteristic in the mechanism by which every concussion of the cylinder containing the test animal can be registered, being transformed into make and break of an electric circuit. It is a modified form of Wolf's actograph, into which a principle adopted in Wagner's apparatus has been introduced.—*R. Kuroda* (Keijo Imperial University).

4656. **Kuroda, R.** Two devices making use of an alarm clock. *Acta Psychol. Keijo*, 1931, 1, 123-125.—One of the devices utilizing an alarm clock consists of a substitute for motive power which very slowly turns a revolving drum. A tin can fitted to the axle of the clock revolves once in an hour and serves as a kymograph, which dispenses with the use of any chronograph. As the drum revolves slowly in comparison with an ordinary kymograph, it is well adapted for the purpose of registering long continued movements, especially when use is made of extended smoked paper involving two drums, one revolving directly with the axle of the clock, the other standing apart from the former and revolving freely around an axis on a stand. The other device is in connection with a time-registering apparatus. The front glass of the clock is removed and the point of the long hand is made to touch a mercury contact when it comes to the spot corresponding to thirty minutes past each hour. Thus every hour can be marked electromagnetically.—*R. Kuroda* (Keijo Imperial University).

4657. **Leach, E.** Bericht über den 5. Kongress für Heilpädagogik in Köln 1930. Konstitutionsanalytische Beiträge zur Psychiatrie des Kindesalters. (Report of the fifth Congress for corrective treatment, Köln, 1930. A contribution to the constitutional analysis of abnormalities in children.) Munich: Müller & Steinicke, 1931. Pp. 101.—This report includes six articles by men connected with the National Pedagogical Laboratory for the Study and Curative Treatment of Pathological Cases, Budapest. The first is an introductory article by L. Szondi, on the program, organization and trend of work in the laboratory. The second, also by Szondi, discusses the procedure and value of constitutional analysis in cases of feeble-mindedness. The third, by A. Lajta, is on the relation between psychic constitution and sugar content (of the blood) in feeble-minded children. The fourth, by F. Sagi, deals with eidetic characteristics, mental deficiency (from the pathological point of view) and constitution. The fifth, by G. Dobak, discusses the relation between skeletal development and feeble-mindedness as shown by X-ray studies. The last, by S. Maday, is a critique of the Bornhardt index of bodily development based on an investigation of normal and pathological cases. The whole series of articles represents an attempt to establish

a correlation between mental and physiological types.—*L. B. Hoisington* (Oklahoma).

4658. **Line, W.** Gestalt psychology in relation to other psychological systems. *Psychol. Rev.*, 1931, 38, 375-391.—The author traces the historical antecedents of the Gestalt revolt against associationism, and critically evaluates their theoretical contributions in the way of problems, methods of approach and emphasis, against the background of other systems. He concludes that it has been chiefly concerned with negative contributions, pointing out defects in other current systems, and has made few positive accomplishments on the basis of which to construct a complete system which shall be sufficiently distinct from other formulations of experimental psychology.—*A. G. Bills* (Chicago).

4659. **Louttit, C. M.** Psychological journals; a minor contribution to the history of psychology. *Psychol. Rev.*, 1931, 38, 455-460.—An analysis of the geographic, chronologic, and subject distribution of 780 journal series in psychology and mental and nervous diseases.—*A. G. Bills* (Chicago).

4660. **Morrison, C. A.** Cinematography of the vocal cords. *Proc. Soc. Exp. Biol. & Med.*, 1930, 27, 936.—A laryngoscope, an illuminating system and a viewing finder are attached to a 16-mm. motion picture camera. The source of light is an over-volted automobile bulb. The device gives a magnification to the entire projecting screen area.—*H. R. Thompson* (Stanford).

4661. **Petri, O.** Il reale enigma della vita. (The real enigma of life.) Rome: Maglione (succ. Loescher), 1930. Pp. 69.—Petri studies how life transforms itself, and how, in the act of fecundation, it passes into the cell, which encloses all memory of sensibility, understanding, intelligence, means which experience shows to be the most useful for protection and provision for itself and for the social aggregate. This reserve of memories is nothing other than the subconscious, which must be considered as the origin of the metapsychical phenomenon. The state, with its wise laws of mental cohesion, constitutes a spiritual morale which is engendered and developed in the psychic sensibility, which is the incontestable origin of the psychic phenomenon. Real life, the real enigma, lives in ourselves, in the chain of an eternity of the past, and the memory of this real life projects itself into us in the present, provided we are capable of discovering and understanding it.—*V. D'Agostino* (Turin).

4662. **Rignano, E.** The concept of purpose in biology. *Mind*, 1931, 40, 335-340.—The following definition of finalism (purpose) removes every suspicion of anthropomorphism from it and includes, as Aristotle's definition does not, all living processes: purpose is the final and invariable result to which certain processes normally lead, by reacting, with self-modification, to changed circumstances. Thus when external circumstances change for an organism, the reaction processes produced by the change of circumstances also change, but the final result of these processes, however different they may be as compared with one another, always remains the same. Concrete examples are given illustrating the appli-



ications of the definition. The relation of purpose to memory and ontological development is discussed.—H. Helson (Bryn Mawr).

4663. Sergi, G. *Il posto dell'uomo nella natura.* (The place of man in nature.) Turin: Bocca, 1929. Pp. 239. Lire 20.—For many years the author has promulgated a new kind of evolution theory, which, on various points, stands in direct contradiction to the commonly accepted views. This book is especially concerned with the origin and history of man's development. The author acknowledges the evolution of species, but attacks most sharply the hypothesis of the transformation of one species into another. According to the author, all species spring from an amorphous living substance, but no species is derived from another species. The ancestors of man should not be sought in any of the other primates. Like the extinct primates, the primates still in existence have already attained their final forms. Man has his own developmental history, and it is this history that the author tries to reconstruct in this book.—A. Angyal (Turin).

4664. Shohl, S. T. *A rat board for X-ray, photography, and operative procedure.* *Proc. Soc. Exp. Biol. & Med.*, 1931, 28, 770-772.—A holding frame is described and illustrated which protects the operator from exposure to X-rays. Coiled springs extending from each corner of a rectangular aluminum sheet are fastened to the animal's paws by means of rubber covered battery clips.—H. R. Thompson (Stanford).

4665. Swift, E. J. *The jungle of the mind.* New York: Scribners, 1931. Pp. ix + 340. \$2.50.—"Thinking is not a natural, spontaneous process. It is an adventure in unknown regions, and adventuring appeals only to sturdy, vigorous minds. Many soon tire of trying to understand the strange things in this strange world. For them meaningless phrases . . . are knowledge, and repetition completes their thinking. Obscurity sounds like wisdom." This statement is supported by a large array of material bearing on numerous fads, cults, and credulities to which men have succumbed. Premonitions, prophecies, astrology, spiritual mediums, telepathy, memory devices, healing cults, certain phases of behaviorism, prejudices and bias, the power of the unconscious, psychoanalysis, and dreams are among the "curiosities" dealt with. Experimental facts are offered in disproof of many of these uncritically accepted beliefs, and these along with the hypotheses which they suggest provide explanations alike for the commonplace and the mysterious, for conscious and unconscious activity, for waking thoughts and for dreams. A chapter is devoted to an evaluation of the behavioristic position, which is criticized for its rejection of the phenomena of consciousness, its neglect of the facts of heredity, and its unrecognized philosophical assumptions, and is commended for its recognition of the importance of the "conditioning environment," a discovery which did not originate with the behaviorists. A further chapter discusses the practical implications of the facts of conditioning and of habit. Freud is credited with a stimulating interest in the dynamic nature of conscious-

ness, but psychoanalysis is criticized for its "debatable interpretations which rest on doubtful facts, the evidence for which is more philosophical and conjectural than psychological." "The trail out of the jungle" is to be found by avoiding "the obstacles to straight thinking—mental complexes, wishful thinking, and vague meaningless words."—H. Peak (Yale).

4666. Tarozzi, G. *L'esistenza e l'anima.* (Existence and the soul.) Bari: Laterza, 1930. Pp. xvi + 240.—The author analyzes the idea of existence and concludes that the object is not conditioned with regard to understanding. The *Leitmotiv* of this book is the idea of contingency, which is not identical with chance, nor exclusive of causality, which Tarozzi explains as virtual continuity of facts. To understanding he assigns the characters of continuity (psychic continuity being essentially continuity of understanding), unity and dynamism, that is to say, of virtuality. Also interesting for psychology are the chapters on substance and the soul and on the idea of immortality. The critique of determinism opens the way to the examination of the idea of the supernatural on a new basis. A new means of posing the problem of the relation between reason and faith presents itself, and shows how rational analysis becomes intuition and constitutes certitude of the existence of the individual mind.—F. D'Agostino (Turin).

4667. Warren, H. C. In defense of some discarded concepts. *Psychol. Rev.*, 1931, 38, 392-405.—The author defends (1) the importance of the concepts of sensation and will, and (2) the factual basis of the three-fold classification into cognition, affection and conation. (1) Substituting the terms "impression" and "expression" for sensation and volition, he argues that these describe distinct processes, important in the organism's biological adjustment, and not adequately provided for in the categories of stimulus and response, because descriptive of the process intermediate between them. (2) The old tripartite division of mind is defended, on the ground that it describes the three aspects of neural process, even though attacked from the introspective angle, and that these three processes can be identified with the stimulations of exteroceptors, interoceptors, and proprioceptors respectively, these terms being used in their generic sense. Exteroceptors mainly give information about the environment, i.e., cognitive; interoceptors give information about internal welfare, i.e., affective; and proprioceptors inform about actions, i.e., conative. It is suggested that other important neurological relationships may be discovered through introspective channels.—A. G. Bills (Chicago).

4668. White, W. A. Professor Freud's seventy-fifth birthday. *Psychoanal. Rev.*, 1931, 18, 237-240.—Address of the chairman at a dinner in honor of Freud's seventy-fifth birthday held in New York, May 6, 1931. Freud is compared with the great thinkers of all times, particularly with Copernicus and Darwin.—D. Shakow (Worcester State Hospital).

4669. Wilson, D. L. Biological organization.

*Quar. Rev. Biol.*, 1931, 6, 143-166.—The organization of biology is considered under the following topics: probability, entropy, physico-chemical laws of organization, Gestalt, thought and organization, and intuition.—O. W. Richards (Yale).

[See also abstract 4929.]

#### SENSATION AND PERCEPTION

4670. Dietz, —. *Etude d'un test de coup d'oeil. Le test d'appréciation des longueurs.* (Study of a test of visual judgment. The test of appreciation of lengths.) *Rev. sci. du trav.*, 1930, 2, 427-443.—In going over previous researches, the author shows that in interpolating another test into the tests of division of lines, and employing lines of different colors on foundations of a different color, the test nevertheless maintains a high reliability.—*Math. H. Piéron* (Sorbonne).

4671. Dubecq, —. *Introduction a l'étude des organes sensoriels et de leurs connexions centrales.* (An introduction to the study of sense organs and their central connections.) *Gaz. hebdom. sci. méd. de Bordeaux*, 1931, 52, 306-313.—The author gives an account of our present knowledge in regard to the sense organs, their description, and their morphological significance. From this study he draws the following general ideas: The morphological classification of sense organs is one which is based on the origin, evolution, and migration of the true sensory cell. The olfactory organ is the primary cell, the organs of tactile, gustatory, vestibular, and auditory sensitivity being secondary. The visual organ belongs to the category of central sense organs. The true sensory cell is always one of nervous significance, undergoing a variable migration during its course of evolution in which it draws away from or approaches the sensory zone or the nerve centers. The olfactory organ is an exception, for its cell does not migrate. A typical completed sense organ is one which makes use of three sorts of elements: a true sensory cell, an accessory sensory cell, and a supporting cell. The true sensory cell is the first neuron in the chain connecting the sense organs and the nerve centers.—*Math. H. Piéron* (Sorbonne).

4672. Dubrenil, G., & Valette, M. *Dispositifs vaso-sensoriels des organes de la gustation et du tact.* (The vaso-sensory distributions supplying the organs of taste and touch.) *C. r. Soc. biol.*, 1931, 107, 341-344.—The author defines "vaso-sensory distributions" as the important, specialized venous networks which are connected with certain sense organs. The diffuse organs of taste and touch are lacking in such distributions, but certain small organs which are specially differentiated, such as tactile hairs, or which are concentrated in a special zone, such as the circumvallate or the foliate papillae, are provided with sensory distributions of this venous type. There is no immediate contact between these arrangements and the sensory nerve terminations, but there is a conjunctive space between the two.—*Math. H. Piéron* (Sorbonne).

4673. Dubrenil, G., & Valette, M. *Dispositifs vaso-sensoriels des organes de l'olfaction, de la vision, et de l'audition.* (The vaso-sensory distributions

supplying the organs of olfaction, vision, and audition.) *C. r. Soc. biol.*, 1931, 107, 344-347.—The authors studied the vascular distributions in the mucous membrane of the nasal cavities (the respiratory zone, the olfactory zone, and the organ of Jacobson) and in the organs of vision, audition, and equilibrium. They found that there was no vaso-sensory distribution in the inner ear, though it was found in the choroid in the eye and was clearly marked but very slightly developed in the olfactory mucous membrane.—*Math. H. Piéron* (Sorbonne).

4674. Dubrenil, C., & Valette, M. *Rôle thermostatique des dispositifs vaso-sensoriels annexés a quelques organes des sens.* (The thermostatic rôle of the vaso-sensory distributions connected with certain sense organs.) *C. r. Soc. biol.*, 1931, 107, 347-350.—Certain more or less well developed venous distributions, whether joined or not to a sensorial zone, seem designed to maintain a constant temperature by means of an incessant flow of warm blood. This thermo-stabilization does not exist in certain deeply embedded specialized organs which are already protected from variations in temperature because of their location.—*Math. H. Piéron* (Sorbonne).

4675. Dufour, M. *Illusions chromatiques observées avec un damier blanc et noir placé au delà du punctum remotum.* (Chromatic illusions observed with a black and white checkerboard placed behind the far point.) *Hygiène ment.*, 1931, 26, 369-370.—Complicated illusions which depend upon the aberrations of sphericity of the optic system of the eye, the diameter of the pupil, irradiation, and contrast.—*Math. H. Piéron* (Sorbonne).

4676. Ginestous, E. *Influence de l'éclairage sur l'acuité visuelle et l'amplitude d'accommodation. Recherches d'optophotométrie clinique à l'aide de l'optomètre de Badal modifié.* (The influence of lighting on visual acuity and the amplitude of accommodation. Researches in clinical optophotometry by means of a modified Badal optometer.) *Gaz. hebdom. sci. méd. de Bordeaux*, 1931, 52, 313-316.—Variations in amplitude of accommodation do not correspond to different variations in lighting. Under a feeble lighting (0.3 lux, permitting an acuity of 4/10) as under a strong one (210 lux under a condition which did not produce dazzling) Donders' law remained absolutely valid, and if it is true that the first symptoms of accommodation failure are manifested under a feeble light, this fact is not connected with the smaller value of amplitude but with a diminution of visual acuity.—*Math. H. Piéron* (Sorbonne).

4677. Josephson, E. M. *Vision and vascularity of the eye.* *Science*, 1931, 74, 339-340.—Negative galvanization causes dilation of the vessels and marked improvement in vision; positive galvanization causes constriction of the blood vessels and diminished vision.—R. R. Willoughby (Clark).

4678. Kestner, O. *Die psychologische Bedeutung des Muskelsinnes.* (The psychological significance of the muscle sense.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1930, 128, 215-219.—The muscle sense has a certain independence of the tactual sense, although it is fused with the latter into a psychological unit.

Frey was able to determine the threshold of the muscle sense. The end organs are the structures in the muscle sheaths (perimysium). The muscle sense plays a large rôle in the genesis of the world of perception. Since it gives us the feeling of being able to execute voluntary movements, the consciousness of the freedom of the will is also connected with the muscle sense.—*S. Krauss* (Frankfurt a.M.).

4679. Koch, C. C. Vilhjalmur Stefansson on the etiology and prevention of snow blindness. *Amer. J. Optom.*, 1930, 7, 237-239.—Snow blindness occurs most frequently not after exposure to bright sunshine but on partly cloudy days when there are no shadows. Eskimos are especially susceptible.—*H. Barry, Jr.* (Tufts).

4680. Koffka, K., & Harrower, M. R. Beiträge zur Psychologie der Gestalt. XXI. (Contributions to Gestalt psychology. XXI.) Colour and organization. Part I. *Psychol. Forsch.*, 1931, 15, 145-192.—In this paper the apparent paradox resulting from the work of S. Liebmann that color in an equivalently bright neutral field has a very low organizing power (Liebmann effect) although under the same conditions color qua color has a maximum effect, is resolved in that color in an equiluminous field is shown to be at the same time relatively highly saturated and yet diffused and badly localized. Color difference will contribute to organization if accompanied by a brightness difference, "hard" (long-waved) colors showing greater organizing powers than "soft" (short-waved) colors. In further experimentation it is shown that Mach's rings are to be explained as an effect of organization in that the factors which affect organization (brightness, "hard" and "soft" colors, absolute intensity of experimental situation, dark adaptation) are shown to affect the Mach rings in the same way.—*J. F. Brown* (Colorado).

4681. McCulloch, O. L. Convergence, accommodation and fusion. *Amer. J. Optom.*, 1930, 7, 221-227.—"The esophore (person with excessive convergence) is as a rule the aggressive, 'go-getter' type of individual, while the exophore (person with convergence lag) is the more plodding, not easily perturbed person."—*H. Barry, Jr.* (Tufts).

4682. Parker, S., & Schilder, P. Das Körperschema im Lift. (The schematic body image in the elevator.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1930, 128, 777-783.—Interesting sensations of weight and position and changes of body image occur during vertical acceleration of speed in the elevator. At the stop following ascent a mass coming out of the head seems to be going up, at the stop following descent the feet seem to extend further down in the form of phantom feet. These are interesting after-sensations of a vestibular nature. By way of an after-effect of vestibular stimulation there arises a dissociation in the image of the body in such a way that a part of the substance of the body comes out of the body, according to the after-sensation. We experience the body as a unit only when no special vestibular stimulation occurs. Unusual stimulation of the vestibule splits the schematic body image. In general, the unity of the body image is disturbed in

the case of conflicting impulses. Here one can draw a parallel with the phenomena of hypochondriacal neuroses.—*S. Krauss* (Frankfurt a.M.).

4683. Stepowska, —. L'examen de la sensibilité auditive chez les enfants arriérés. (Examination of auditory sensitivity in backward children.) *Hygiène ment.*, 1931, 26, 98-99.—Simple experiments showing that in retarded children there is found a diminution of the memory and auditory attention which is almost always accompanied by a slackening of auditory excitability. In mongolian imbeciles it is found that their auditory sensitivity for words is very weak; they are incapable of repeating two or three figures or a few words, but the examination of auditory sensitivity for noises and musical sounds shows, on the contrary, satisfactory results; auditory excitability always shows a slackening, often marked, as in other retarded cases.—*Math. H. Piéron* (Sorbonne).

4684. Tournay, A. Nouvelles remarques et recherches expérimentales sur les effets sensitifs des perturbations sympathiques. (Recent observations and experimental researches on the sensory effects of disturbances in the sympathetic system.) *Rev. neur.*, 1931, 38, 413-435.—The article is a continuation of experiments described in 1921. The author seeks to discover by what physiological mechanism the disturbances determined in the sympathetic system act on sensitivity and motility.—*Math. H. Piéron* (Sorbonne).

4685. Waldman, J. L., Wade, F. A., & Aretz, C. W. Hearing and the school child. Hearing, school progress and achievement of public school children. Washington: Volta Bureau. Pp. 223. \$2.00.—All the children in grades IV to VIII inclusive in two Philadelphia schools were given the 4A audiometer tests for hearing, the National Intelligence Test and the Stanford Achievement Test. The number of cases studied is 1079. The hearing tests show 5.5% with a loss of 9 sensation units or more. Retest coefficients of the audiometer ratings give *r*'s ranging from .46 to .83 for various groups. Speech defects were found in 87% of the deafened. The correlations between EQ and hearing and between IQ and hearing are practically zero. Eliminating cases of late entrance, poor attendance, etc., the total number of cases is reduced from 1079 to 552, and the correlations between hearing and EQ and IQ are raised to .2. Those with very good hearing have higher IQ's and EQ's than those with poor hearing. The poor hearers show more grade repetition and greater school retardation. Poor hearing is held to be a cause of inferior school accomplishment and speech reading is strongly recommended as a means for overcoming this deficiency in school achievement.—*R. Pintner* (Teachers College, Columbia).

4686. Wangensteen, O. H., & Carlson, H. A. Hunger sensations in a patient after total gastrectomy. *Proc. Soc. Exp. Biol. & Med.*, 1931, 28, 545-547.—Gastrectomy was made for carcinoma. The proximal end of the duodenum was closed and an anastomosis made between esophagus and jejunum. Ten months later, the patient was in good health and reported that his hunger sensations were the



same as before the operation, excepting that he became hungry more frequently. There was no dilation of the jejunum, and a good functioning stoma. A tracing by the balloon and tube method, after 8 hours of starvation, showed practically no jejunal activity, although the patient was very hungry. After a 32-hour period with only one light breakfast, there were feeble rhythmical contractions, occurring 12 to 15 a minute, with great hunger and weakness.—*H. R. Thompson* (Stanford).

4687. **Yoshida, S.** Reaction time of heat-pain sensation and heat-itch sensation and its relation to the temperature of skin. *Jap. J. Psychol.*, 1931, 6, 95-115.—A thermal stimulus of high temperature applied on cutaneous surface produces sensations of heat-pain and heat-itch. The present study is devoted to clarify the relation between the temperature of skin as well as of stimulus and the time elapsing from the stimulation of the skin to the appearance of these sensations. Usually two heat-pains, which take place successively, are distinguished and after them comes a sensation of heat-itch, but the intervals between these sensations change remarkably. Generally speaking, the higher the temperature of stimulus rises, the sooner appear these sensations, with the results that the intervals between them also become shorter. If the temperature of stimulus is constant, the heat-pains occur soonest when the temperature of skin is at 36° C. and become later when the temperature becomes either higher or lower than that. As for the heat-itch, its appearance, too, becomes sooner when the temperature of skin rises high up, in consequence of which it sometimes happens that the heat-itch and the second heat-pain fuse into one.—*S. Takagi* (Kyoto).

[See also abstracts 4647, 4653, 4710, 4728, 4742, 4757, 4857, 4866, 4933, 4986, 4993, 5059.]

#### FEELING AND EMOTION

4688. **Chavigny, —.** La peur aux armées en campagne, sa médecine légale. Guerre de 1914-1918. (Fear in field armies and its medico-legal aspects. The war of 1914-1918.) *Strasbourg méd.*, 1930, 90, 606-612; 621-626; 645-652; 705-711; 785-793.—After a review of the causes of individual fear, the author discusses the elements which compose it: the intellectual (the idea), the affective (suffering), the physical (the vaso-motor, visceral disturbances, etc.), and the active elements (effort). He then shows by a very extensive clinical documentation what fear is as found in armies. From these observations he concludes that such fear does not present any special characteristics. One additional observation can sometimes be made: if the fear is engendered immediately after the emotional shock which caused it, there is in a certain number of cases a period of meditation, of maturation, which is analogous to that observed in cases of hysterical, post-traumatic accidents. In the second part of the paper the author considers the medico-legal problem and the military consequences of examination for cases of pathological fear.—*Math. H. Piéron* (Sorbonne).

4689. **Kanner, L.** Judging emotions from facial expressions. *Psychol. Monog.*, 1931, No. 3. Pp. 94.

—Primarily a critical discussion of attempts to name and classify emotions and to judge emotions from facial expressions. Data were obtained from first-year medical students of the Johns Hopkins University who viewed the Feleky photographs, projected on a screen. The author presents a table containing the 365 terms furnished by the subjects and showing their interrelationships; he gives, in addition, results concerned with the identifiability of the photographs, the ability to judge facial expressions, and the correlation between intelligence and judgments of facial expression. Portraits, at best, are "static cross-sections of something that has a highly dynamic significance," and "in order to do justice to the multiplicity of factors, one has to evaluate the verbal responses in the light of their common usage, synonymic values, semantic and etymologic implications, the situational problem, the qualities of the interpreted expressions, and the personalities of both the individual showing the emotional reaction as well as the one called upon to judge it."—*F. A. C. Perrin* (Texas).

4690. **Lewin, K., & Dembo, T.** Untersuchungen zur Handlungs- und Affektpsychologie. X. Der Ärger als dynamisches Problem. (Investigations in the psychology of action and affection. X. Anger as a dynamic problem.) *Psychol. Forsch.*, 1931, 15, 1-144.—This paper is an experimental investigation of anger in which the subjects were given an impossible task to perform under conditions which induced very real anger (that the task was impossible was unknown to them). From a certain square marked off on the floor the subjects had, in one situation, to throw ten rings in succession over the neck of a bottle; and in another to get a flower at a certain distance from the square without stepping out of the square. The experiment often lasted several hours, or was resumed two or three days in succession. Everything the subject said or did was noted stenographically in the greatest detail. A very careful study was made of the topology of the situation, the field forces, the "inner" barriers (difficulties in the way of attainment), the "outer" barriers (factors inducing the subject to stay in the experimental situation). The dynamic behavior of the individual within the field is treated in detail. The outbreak of anger is found to occur when the tensions become too great, and with the explosion the barriers within the psychic field are lifted so that the whole fuses into a general field, with a certain reduction of the tensions. Theoretical and methodological considerations, particularly with regard to compensation, are included and compose a considerable portion of the paper. An appendix of the stenographic notes of the individual experimental situations is included.—*J. F. Brown* (Colorado).

4691. **Raines, L.** Emotion: a classified bibliography. Part V. *Bull. Bibliog.*, 1931, 14, 82-83.—Reference numbers 270-313 are included under the following divisions: deception; tests of emotionality, personality, etc.; association; Colgate Mental Hygiene Tests; Downey Will-Profile; introvert-extrovert. (For Parts I, II, III and IV see III: 2965;



III: 4392; IV: 2901 and V: 1805).—J. W. H. Ross (Clark).

4692. Raines, L. **Emotion: a classified bibliography. Part VI.** *Bull. Bibliog.*, 1931, 14, 103-108. —(For Parts I, II, III, IV and V see III: 2965; III: 4392; IV: 2901; V: 1805 and V: 4691). Part VI is the final instalment of the bibliography on emotion and includes sections G through M, with reference numbers 314 to 540. This part includes sections on emotionality tests, other methods of investigation, emotions in works on dramatics, public speaking, etc., abnormal, clinical and delinquent, control and education, genesis or development, and general or not otherwise classified.—C. C. Neet (Clark).

4693. Thouless, R. H. **The measurement of emotion.** *Proc. Roy. Phil. Soc. Glasgow*, 1928-29, 57, 85-89.—The author holds that while we cannot measure quantitatively subjective experience, we may make use of various devices to record and measure certain physiological reactions underlying the emotional life of an individual. Breathing, pulse rate, and blood volume changes have been used for some time. The interpretation of such records is still a matter of controversy. There is more agreement, however, in the use of the measurements of bodily electrical phenomena. Gildemeister has shown that the apparent changes in resistance in the psychogalvanic reflex are not really resistance changes, but changes in polarization. This conclusion has been challenged, but the author has repeated Gildemeister's work and confirms his results. The methods of recording these electrical changes may find certain practical applications in the investigation of the psychoneuroses or in criminal procedures. If they are truly concomitants of emotion then emotional variability is much greater than is commonly supposed.—C. Landis (N. Y. Psychiatric Institute).

[See also abstracts 4699, 4719, 4867, 4980, 4994.]

## ATTENTION, MEMORY AND THOUGHT

4694. Cherau, G. **Le surmenage. Incompréhension par les gens intelligents de l'intelligence humaine.** (Overwork. Lack of comprehension by intelligent people of human intelligence.) *Psychol. et vie*, 1931, 5, 135-137.—The brain has a limited action; the memory and the intelligence are only the same imponderable matter. To cram the memory is to dwarf the intelligence. The end of study should not be to make individuals wise with the intelligence of others, but to prepare the intelligence itself to discover more of all that we still do not know about the world.—Math. H. Piéron (Sorbonne).

4695. Crook, M. N., & Harden, L. **A quantitative investigation of early memories.** *J. Soc. Psychol.*, 1931, 2, 252-255.—All the early memories which could be recalled were recorded on a chart on which the individual indicated the time to which each referred and his certainty. It was found that there was a negative relation between the number of such memories and neuroticism as indicated by high scores on a Pressey X-O test. This same negative correlation was found between the earliest memories of which a person was most certain and the Pressey

scores. If, however, the less certain memories are considered, the reverse relationship appears. Alternative explanations are suggested.—E. B. Newman (Frankfurt).

4696. Hummer, E. **Ueber die Aufmerksamkeitsverteilung.** (Division of attention.) *Vjsch. f. Jugendk.*, 1931, 1, 116-121.—The author's experiments consisted in having 107 persons (normal school children, and adults of both sexes with and without secondary education) write previously practised signs as fast as possible during 1½ minutes while counting aloud the strokes of a metronome. Her conclusions are that ability to divide the attention runs in a general way parallel with the grade of intelligence, and thus psychophysical energy is one of the factors which constitute intelligence; also that the ability to divide attention develops, at least in girls, up to the thirteenth year, but not afterward.—M. E. Morse (Catonsville, Md.).

4697. Leonhardt, C. **Psychologische Beweisführung in Ansehung existenzstreitiger Vorgänge, erläutert an einem praktischen Fall.** (Psychological proof in respect to disputed events, as illustrated in a practical case.) *Krim. Monatsh.*, 1931, 5, 145-149.—The author shows how the evaluation of testimony through the application of psychological methods works out in a particular case of burglary. He is at present occupied with the problem of obtaining significant correlations between such symptoms as crying and stuttering and guilty knowledge.—P. C. Squires (Clinton, N. Y.).

4698. Leonhardt, C. **Psychologische Beweisführung.** (Psychological proof.) *Monatssch. f. Krim.-psychol. u. Strafrechtsref.*, 1931, 22, 140-151.—The author purposes to lift up from its degraded state, through psychological means of proof, the evaluation of legal testimony. He takes his departure from the fact that the examination of witnesses gives rise to mental symptoms such as crying and stuttering. In order to determine through which feeling a symptom or group of symptoms is expressed in a concrete case, certain so-called interpretive methods are applied. Auxiliary test methods should be applied to determine whether certain symptoms are genuine or not. A third and fourth group of methods are used to develop genuine symptoms in response to questioning and to make a final selection separating the determinate from the indeterminate symptoms.—W. Beck (Leipzig).

4699. Meltzer, H. **The forgetting of pleasant and unpleasant experiences in relation to intelligence and achievement.** *J. Soc. Psychol.*, 1931, 2, 216-229.—College students were asked on two successive occasions to recount vacation experiences and rate them as pleasant or unpleasant. The results from this, both as to amount of material and affective tone, were correlated with scholastic records and intelligence test scores. No significant results were found.—E. B. Newman (Frankfurt).

4700. Moldovan, M. **La persistance des représentations et la maîtrise de soi.** (The persistence of ideas and the mastery of self.) *Psychol. et vie*, 1931, 5, 94-96.—Math. H. Piéron (Sorbonne).

4701. Wilson, F. T. A comparison of difficulty and improvement in the learning of bright and dull children in reproducing a descriptive selection. *Genet. Psychol. Monog.*, 1931, 9, 395-435.—The subjects for the experiment were chosen as follows:

|                      | Dull 9-yr-olds | Bright 9-yr-olds | Dull 12-yr-olds | Bright 12-yr-olds |
|----------------------|----------------|------------------|-----------------|-------------------|
| No. of cases . . . . | 15             | 17               | 16              | 15                |
| Average C.A. . . . . | 9-1            | 9-2              | 12-2            | 12-2              |
| Average M.A. . . . . | 7-9            | 10-5             | 10-4            | 13-11             |
| Average I.Q. . . . . | 85             | 114              | 85              | 115               |

The study reports the ranking of certain "idea units" in a given selection and the improvement of the four groups during a series of practices in reproduction. The conclusions indicate that the same ideas were hardest for all four groups of pupils and that the same ideas were easiest for all four groups. Position of an idea in the selection seemed to play little part in making it easy or hard to recall. Ideas of location were easier than ideas of description or abstract ideas. "Part of speech may be a factor as far as conjunctions are concerned, but does not appear to be so in the case of nouns, verbs and adjectives." Suggested, but not proven, differences between the four groups indicate that abstractness is relatively easier for the bright than for the dull groups; improvement is arithmetically greater for bright than for dull children on the more difficult ideas, but about the same on the easier ideas. Sense of coherence and boredom affect the bright children more than the dull ones. "Difficulty" embraces many factors, such as difficulty of the nature of the concept itself, interest, attention, etc.—F. M. Teagarden (Pittsburgh).

[See also abstracts 4743, 4834, 4874, 4921, 5005, 5019.]

#### NERVOUS SYSTEM

4702. Barre, A. *Syndrôme vestibulaire et syndrôme cérébelleux*. (A vestibular and a cerebellar syndrome.) *Sci. méd. pratique*, 1930, 5, 133-137.—The author endeavors to make a clear delimitation between the vestibular and the cerebellar territories and a differentiation between the two syndromes.—Math. H. Piéron (Sorbonne).

4703. Beaman, G. B., Jr., & Davis, H. Block of the spinal cord produced by cold. *Amer. J. Physiol.*, 1931, 98, 399-405.—"A method is described for locally cooling the spinal cord in the decerebrate cat. It is shown that such local cooling produces a functional block in the cord and that the resulting condition of the animals corresponds closely with that developing after surgical transection. The production of such a functional block is not attended by the usual excitatory effects in the form of muscular spasms and high blood pressure, which inevitably follow immediately upon surgical transection." The block so produced is readily and completely reversible up to intervals of at least as long as ten minutes.—C. Landis (N. Y. Psychiatric Institute).

4704. Bishop, G. H., & Heinbecker, P. Effects of frequency and intensity in stimulation of cervical sympathetic nerve fibers to eye. *Proc. Soc. Exp.*

*Biol. & Med.*, 1931, 28, 682-684.—The nerve was stimulated posterior to the superior ganglion and observations made on the peripheral response of the cat and rabbit, decerebrated or anesthetized, and action potentials recorded from the cut central end of the nerve. Single preganglionic stimuli elicit no postganglionic repetition. Preganglionic and postganglionic amplitudes of potential are closely proportional as stimulus strength is increased. Weak, rapid stimulation apparently affects the same peripheral area to the same degree as strong, slow stimulation. The action potentials show, however, that none of a given effect is produced when the strength of stimulation does not excite the most irritable fibers of a specific group, as indicated by a wave in the potential record. A single maximum stimulus produces an effect, but does not give the response obtainable by repeated maximal stimuli.—H. R. Thompson (Stanford).

4705. Brooks, C. M. A delimitation of the central nervous mechanism involved in reflex hyperglycemia. *Proc. Soc. Exp. Biol. & Med.*, 1931, 28, 524-526.—Well nourished cats which had not been fed for 24 hours were anesthetized with sodium barbital intravenously. After a three-minute period of interrupted tetanic stimulation of the right brachial nerve, reflex rises in blood sugar were noted in 10 thalamic, 26 decerebrate, and 15 decapitate animals, and 15 with section through the medulla oblongata (10 anterior and 5 posterior to the *branchium pontis*). The results are compared with those obtained from 26 anesthetized control animals with central nervous system intact. Blood sugar assay was made by Folin's method. Thalamic animals deviated from controls by -1%; decerebrates deviated +3%; and animals with section anterior to the *brachium pontis*, -3%. Sections posterior and decapitates showed no rise in blood sugar. The writer concludes that there is a mechanism located in the medulla, in the region of the vasomotor center, which is essential to a normal rise in blood sugar concentration when an afferent nerve is stimulated.—H. R. Thompson (Stanford).

4706. Gilson, A. S. The "iterative" nature of the vagus nerve fibers to the heart. *Proc. Soc. Exp. Biol. & Med.*, 1931, 28, 879-881.—Inhibition of heart caused by a changing electrical stimulus to vagus of the turtle depends upon (1) the shape of the time-voltage curve, (2) strength of individual shocks, (3) number of stimuli applied, and (4) frequency of stimulation. These variables must act through changes in neural response in accordance with the all-or-none law; and since the stimulus strength must attain the nerve fiber threshold to produce any inhibition, increasing the stimulus increases the number of fibers acting. Increasing the rate of stimulation adds to cardiac inhibition only to a limited extent, probably related to a Wenckebach type of nerve inhibition. According to the Lapieque theory, nerve chronaxy values are less than end organ chronaxies, respectively. Latent addition accounts for threshold response. But in many preparations a single shock to the vagus completely stops the turtle heart; and the cathode ray oscillograph shows a single re-

sponse volley in the nerve. Records of many experiments support the view that cardiac inhibition depends upon the number of vagus inhibitory fiber impulses in a given period of time.—*H. R. Thompson* (Stanford).

4707. Langworthy, O. R., & Richter, C. P. The influence of efferent cerebral pathways upon the sympathetic nervous system. *Brain*, 1930, 53, 178-193.—This study was an attempt to determine some of the influences from the brain that control the primary autonomic reflex arcs. 36 cats were used in these experiments. Using the galvanic skin response as a measure of sweat-gland activity, the controlling influences from the cortex, brain-stem and spinal cord were investigated. It was concluded that the same cerebro-efferent pathways which influence somatic motor cells also control pre-ganglionic sympathetic cells; this cerebral control is predominantly an inhibitory one. Any cerebral centers influencing lower centers seem to exert final control through well-known cerebro-efferent pathways.—*V. M. Jones* (Boston Psychopathic Hospital).

4708. Lindemann, E. Studies of action currents in laryngeal nerves. *Proc. Soc. Exp. Biol. & Med.*, 1930, 27, 479-480.—Experiments on the superior and inferior laryngeal nerves of dogs to determine the relation between action currents in the nerves and voice production show that when no voice is produced the action current line is practically at rest. The inferior laryngeal gives an action current during voice production which has regular oscillations at the same frequency as the voice line, and this frequency changes with the pitch. After transection of the inferior laryngeal, oscillation frequency of the central end equalled the pitch of the voice. The writer assumes that potential changes travel from the central organ to the larynx. Transection of the superior laryngeal eliminates the regular oscillations in the inferior laryngeal.—*H. R. Thompson* (Stanford).

4709. Monaghan, B. R., & Schmitt, F. O. The absorption spectrum of medullated and of non-medullated nerves. *Proc. Soc. Exp. Biol. & Med.*, 1931, 28, 705-708.—The spectromicroscope shows that the non-medullated nerves of *Homarus* and of *Lumulus* resemble each other closely in absorption spectra, each presenting two distinct bands. The hemochromogen present in these nerves does not react to reagents as does cytochrome, but muscles of *Lumulus*, *Homarus* or frog show typical cytochrome four-banded spectra. Medullated green frog sciatics show no cytochrome, nor any hemochromogen having a similar spectrum. But they do give a marked absorption in the blue, probably due to carotinoid pigments, phosphatids and allied substances.—*H. R. Thompson* (Stanford).

4710. Monbrun, —. L'examen ophtalmologique en neurologie. (The ophthalmological examination in neurology.) *Méd.*, 1931, 12, 19-23.—An ophthalmological examination is indispensable. Pupillary stasis is a sign of cranial hypertension, and certain other neuro-ocular signs furnish a basis for a diagnosis of its location.—*Math. H. Piéron* (Sorbonne).

4711. Monnier, A. M., & Monnier, A. Etude du

nerf de la ligne latérale de *Mustelus Canis* au moyen de l'oscillographe cathodique. (A study of the lateral line nerve in *Mustelus canis* by means of the cathode oscillograph.) *Ann. de physiol.*, 1930, 6, 693-717.—The authors had a double end in view; they wished to establish the relation between the metabolic activity of the lateral line nerve and its functional rapidity, and, secondarily, they sought to furnish a contribution to the physiology of the line organs through a study of the nerve fibers which lead to these organs. They used a cathode oscillograph similar in principle to that of Gasser and Erlanger. The use of this apparatus revealed in the nerve three waves of different rapidity. The first two were the more rapid and seemed to permit a transmission of loud sensations of low frequency. A retardation of the respiratory rhythm consecutive to pressure exercised on the lateral organs seemed to attribute the third wave to the fibers of the pneumogastric nerve of which the lateral line nerve is a branch. There is a bibliography of 35 titles.—*Math. H. Piéron* (Sorbonne).

4712. Nicoglou, —. Observation d'un monstre cyclocephalien. (An observation on a cyclocephalic monster.) *Gaz. méd. du centre*, 1931, 36, 68.—A male child was born at term presenting as its primary anomaly a total absence of eyes and nose. At the autopsy it was found that the brain was deficient. It was reduced to a simple covered cylinder attached to the base of the skull, without any sign of division into the ordinary hemispheres by circumvolutions. However, the cerebral peduncles, the annular protuberance, the cerebellum, and the bulb were clearly differentiated. There was only one olfactory nerve, and two very fine fibers coming from the junction of the cerebral peduncles seemed to be the optic tracts.—*Math. H. Piéron* (Sorbonne).

4713. Ranson, S. W. Unmyelinated sensory fibers. *Proc. Soc. Exp. Biol. & Med.*, 1931, 28, 381-382.—After removal of the right abdominal sympathetic chain from the diaphragm to the pelvis, on cats, five or more weeks were allowed for sympathetic degeneration. Pyridine-silver preparations showed great numbers of unmyelinated fibers in the saphenous, but very few in the nerve to the vastus medialis. Osmic acid preparations from the same sources gave practically the same results.—*H. R. Thompson* (Stanford).

4714. Ranson, S. W., & Ingram, W. R. A method for accurately locating points in the interior of the brain. *Proc. Soc. Exp. Biol. & Med.*, 1931, 28, 577-579.—This method is used for locating points with reference to the base lines of the instrument devised by Horsley and Clark for local stimulation or destruction. After 10% formalin injection, straight copper wires are passed through the brain in situ, in the zero horizontal and two vertical planes, the latter located respectively 7.5 and 17.5 mm. anterior to the zero point. The brain is then imbedded in celloidin and sectioned vertically in line with the established planes. The openings left by the horizontal wires serve as reference points for locating the position of structures. Brain shrinkage may be com-



puted from the known distance between vertical planes.—H. R. Thompson (Stanford).

4715. Travis, L. E., & Fossler, H. R. An electrophysiological study of the simple reflex circuit. *Proc. Soc. Exp. Biol. & Med.*, 1931, 28, 1043-1046.—Recent experiments have shown that, following a simple reflex stimulation, the presence of electrical energy may be recorded in all parts of the nervous system studied. Duplicate instruments were used in the present study, by which simultaneous recordings were made of electrical energy in varying parts of the nervous system, during the Achilles reflex in rats under light ether anesthetic. In the spinal cord, contralateral and ipsilateral conduction latencies showed no consistent relationship. The distances of electrodes from the cord origin of the sciatic nerve are not consistently related to latencies. When electrodes are placed about midway in the arc anatomically, the mean latency value is much less than half the Achilles reflex response latency value. Latency variations may be partially explained by differences in depth of anesthesia. A table is given showing conduction latencies for 19 animals.—H. R. Thompson (Stanford).

4716. Woronzow, D. S., & Judenitsch, N. A. Beobachtungen über das Refraktärstadium des Nerven. V. Mitteilung. Beobachtungen über die Aktionströme des Nerven und Muskels bei Reizung des Nerven mit dem konstanten Strom. (Observations concerning the refractory state of nerves. 5th communication. Observations concerning the action current of the nerves and muscles when stimulated by a constant current.) *Pflüg. Arch. f. d. ges. Physiol.*, 1930, 224, 80-99.—At the conclusion of stimulation with a constant current, the impulse appears not only at the cathode but also at the anode. In the latter case there seems to be a greater latent period. At the cathode a few persisting impulses are excited. The cathode, even when the current ceases, preserves its activity during the absolute refractory state. Impulses of various intensities appear in the nerves. The weaker ones activate the muscles more slowly than the intense ones.—D. S. Oberlin (Bryn Mawr).

4717. Woronzow, D., & Judenitsch, N. Beobachtungen über das Refraktärstadium der Nerven. VI. Mitteilung. Aktionströme des Muskels und Nerven bei unipolaren Einwirkung des Induktionsstroms auf der Nervenregung. (Observations concerning the refractory state of nerves. 6th communication. The action current of muscles and nerves in the case of the unipolar influence of the induction current on the excitation of the nerves.) *Pflüg. Arch. f. d. ges. Physiol.*, 1930, 224, 490-510.—The increase in intensity of muscle action, in the case of a current induced during the refractory period, is determined by the origin of a second impulse. At a certain moment in the development of the excitation, this moment being the end of the absolute refractory state and the beginning of the relative one, the cathode loses its stimulated activity. The more it acts in this manner, the stronger the current. If the anode of an induction current has an effect on the excitation, then there is a shortening of the absolute

refractory period. This shortening is in connection with the appearance of the second impulse. There is, however, no decrease in the length of the second refractory period or the latent period. In frogs the induction current brings forth a wave of positive polarization, which appears more intense as the current increases, and becomes noticeably less at the moment of excitation in the nerve.—D. S. Oberlin (Bryn Mawr).

[See also abstracts 4751, 4754, 4757, 4847.]

#### MOTOR PHENOMENA AND ACTION

4718. Bainbridge, F. A. The physiology of muscular exercise. (3rd ed., rewritten by Bock, A. V., and Dill, D. B.) New York: Longmans, Green, 1931. Pp. viii + 272. \$5.00.—The present edition of this well-known work deals with the physiology of muscular exercise in a strictly scientific but broad sense, even including some reference to the psychological effects of exercise. The emphasis, however, is placed upon biochemistry. The topics considered include: the processes of muscular energy; the mechanical efficiency of the body; the temperature of the body during exercise; the blood supply during active exercise, physical-chemical changes in the blood and control of respiration; the output of heat during exercise; the passage of oxygen into the tissues during exercise; the consumption of oxygen by the body muscles and the heart; the coordinating mechanisms involved in exercise; the significance of diet, training, and high altitudes in exercise; the after-effects of exercise, including fatigue. An excellent bibliography of over 400 titles is appended, and an analytical index provided.—L. Carmichael (Brown).

4719. Buytendijk, F. J. J., & Eerelman, J. La réaction galvanique de la peau. (The galvanic reaction of the skin.) *Arch. néerl. de physiol.*, 1930, 15, 358-380.—The galvanic reaction of the skin is not a direct expression of emotion, but of the initial activity which is produced in the central nervous system in conditions depending upon certain intensities and "Gestalt" of the excitation. Experimenting with the frog, the authors have found that the acoustic stimulation gives very inconstant results. Stimulation by touch, either pain or heat, gives very active responses. Stimulation by light or darkness sets up a reaction which disappears rapidly upon repetition.—C. Landis (N. Y. Psychiatric Institute).

4720. Cannon, W. B. Studies on the conditions of activity in the endocrine organs. XXVII. Evidence that the medullary adrenal secretion is not continuous. *Amer. J. Physiol.*, 1931, 98, 447-452.—"Observations for and against the continuous secretion of adrenin are reviewed, and the point is made that the evidence in favor of continuous secretion has been obtained under disturbing experimental conditions." Studies of quiet, healthy animals with denervated hearts show no noteworthy differences between the basic heart rate before or after the adrenal medulla was inactivated. Since the denervated heart is highly sensitive to adrenin the conclusion is drawn that adrenin is not secreted continuously.—C. Landis (N. Y. Psychiatric Institute).



4721. Dodge, R., Travis, R. C., & Fox, J. C. Optic nystagmus. III. Characteristics of the slow phase. *Arch. Neur. & Psychiat.*, 1930, 24, 21-34.—V. M. Jones (Boston Psychopathic Hospital).

4722. Drabovitch, W. J. P. Pavlov et sa doctrine des réflexes conditionnels. (I. P. Pavlov and his doctrine of conditioned reflexes.) *Psychol. et vie*, 1931, 5, 88-92.—*Math. H. Piéron* (Sorbonne).

4723. Dusser de Barenne, J. G., & de Kleyn, A. On reciprocal innervation of the eye muscles in the tonic labyrinthine reflexes. *Acta Oto-Laryngol.*, 1931, 16, 97-116.—A description is given of the apparatus for registering the degree of contraction and relaxation of the individual eye muscles. Fixation of the fundus orbitae was found to be essential in obtaining straight control lines of the muscles. With very few exceptions, reciprocal innervation was observed for inferior and superior rectus eye muscles when the animals were rotated around their longitudinal axis. More exceptions occurred in the case of the oblique muscles when the animals were rotated around a bipontal axis. The negative results of Lorente de Nó were probably due to defects of technique, improved by the present experimenters.—*M. B. Mitchell* (George School, Pa.).

4724. Dwelshauvers, G. Du réflexe en général et du réflexe graphique en particulier. (On the reflex in general and on the graphic reflex in particular.) *Psychol. et vie*, 1931, 5, 80-82.—The author defines the reflex as a motor reaction localized in the centers subjacent to the cerebral cortex in response to a stimulus not ignored by consciousness, but in which consciousness plays no part. After having discussed motor and secretory reflexes, he discusses the graphic reflex more particularly. If one follows a regular oscillatory movement, that of a pendulum, for example, this sensation gives way through the reflex to imperceptible movements of the fingers which one can record and which give a sine curve which follows the observed oscillatory movements. This reflex, says the author, raises numerous problems relating to mental structures and to the measurement of reaction time.—*Math. H. Piéron* (Sorbonne).

4725. Edwards, H. T., Richards, T. K., & Dill, D. B. Blood sugar, urine sugar and urine protein in exercise. *Amer. J. Physiol.*, 1931, 98, 352-356.—"Hyperglycemia is uncommon in exercise with little or no emotional stress but common in exercise with emotional stress on the football field. In football players it is not much influenced by age within the range of 16 to 22 years, by diet nor by mass of spectators. Before the game begins blood sugar is normal and it appears to reach a peak when the game is half over. At the end of the game blood sugar may be normal while urine sugar is high, indicating that blood sugar has passed through a maximum. Inferentially if exercise were to continue (as in marathon races) hypoglycemia might result. Protein commonly appears in the urine of football players, increasing in concentration as play continues."—*Z. Piotrowski* (N. Y. Psychiatric Institute).

4726. Freeman, G. L. Mental activity and the muscular processes. *Psychol. Rev.*, 1931, 38, 428-447.—The facilitative effect of muscular processes

upon mental activity is explained in terms of altered excitability of cortical centers, caused by the spread of excitation from lower neural centers involved in the muscular contractions. Postural sets, etc., reinforce and sustain cortical action through a stream of proprioceptive impulses. But excessive muscular contraction may inhibit the precise neural integrations. Since the degree of tension is regulated autogenically, the maximum varies with the individual and with conditions. Habituation reduces and fatigue increases it.—*A. G. Bills* (Chicago).

4727. Grimbaum, A. A. The pointing position of the hand as a pathological and primitive reflex. *Brain*, 1930, 53, 267-277.—Report of ontogenetic and pathological observations and experiments. The pointing position of the hand appears where the act of grasping is either suppressed or prevented by external conditions. "Everything points towards the conclusion that particular mechanisms such as 'grasping' and 'pointing' form a unity considered as physiological mechanisms and as modes of behaviour."—*V. M. Jones* (Boston Psychopathic Hospital).

4728. Haycraft, G. F. Coal-miner's nystagmus. New York: Oxford Univ. Press, 1931. Pp. 15. \$30.—The chief subjective symptoms of coal-miner's nystagmus are poor vision, headache, photophobia, giddiness, insomnia, and apparent movement of stationary objects. The physical signs observable to the examiner are retraction of the head, body tremors, tachycardia, ataxia, swaying and vertigo after bending, nystagmus, and contraction of the field of vision. According to the author "it seems probable that oscillation of the eyeballs is started by defective illumination, but that no great inconvenience is felt until the general nervous system has been weakened by exhaustion, lack of sunlight, some intercurrent illness or accident. A neurosis having been thus established, the defective sight and apparent movement of stationary objects caused by the oscillation become unbearable. The establishment of this neurosis is probably hastened by the knowledge that the sufferer can obtain compensation which is more remunerative than the wages he can earn in the present depressed state of the coal trade." Certain treatments for the disease are suggested.—*N. L. Munn* (Pittsburgh).

4729. Huber, E. Evolution of facial musculature and facial expression. Baltimore: Johns Hopkins Press, 1931. Pp. xii + 184. \$2.50.—Chapter I comprises historical notes, and Chapter II considers briefly the evolution of facial musculature in the lower mammals. The bulk of the book is contained in Chapter III, facial musculature and expression in the primates, and Chapter IV, facial musculature in various human stocks. Chapter V treats the ontogeny of the facial musculature; Chapters VI and VII, on facial expression, are of a general, observational, and descriptive nature. There are 28 original drawings by the author, and a 20-page bibliography.—*R. R. Willoughby* (Clark).

4730. King, C. E. The effect of respiration on the scratch reflex. *Amer. J. Physiol.*, 1931, 98, 368-372.—The activity of the respiratory center under

certain conditions is definitely reflected in the scratch reflex. Inspiration affects this reflex by a lowering of the threshold and by a prolongation of the after-discharge. The pattern of the reflex is not altered, but its intensity is.—*C. Landis* (N. Y. Psychiatric Institute).

4731. *Kupalov, P. S., Lyman, R. S., & Lukov, B. N.* The relationship between the intensity of tone-stimuli and the size of the resulting conditioned reflexes. *Brain*, 1931, 54, 85-98.—In the results of these experiments enough consistency prevailed to lead to the belief that conditioned reflexes to auditory stimuli are governed by definite principles, that no single principle will cover completely even the interdependence of intensity of stimulus and size of resulting salivary reflex, and that one and probably the most fundamental of those principles is the tendency for the magnitude of the conditioned reflex to increase with the intensity of the tone-stimulus in a relationship that is probably exponential.—*V. M. Jones* (Boston Psychopathic Hospital).

4732. *Masson-Oursel, P.* La maîtrise des réflexes selon l'Occident et l'Orient. (The mastery of reflexes according to the occident and the orient.) *Psychol. et vie*, 1931, 5, 85-87.—Our civilization seems to set forth the reflex as a criterion of mastery. The orientals, on the contrary, seek to obtain normal capacities and supernatural power by placing the reflexes under conscious control, under the rule of the will. Between these two methods, the occidentals have not actually any choice, not having the hereditary aptitudes which permit success in the oriental method, and being obliged to live in the existing complicated society.—*Math. H. Piéron* (Sorbonne).

4733. *Metelnikov, S.* Rôle du système nerveux et des réflexes conditionnels dans l'immunité. (The rôle of the nervous system and conditional reflexes in immunity.) *Ann. Inst. Pasteur*, 1931, 46, 137-168.—The author applied the Pavlov method to the study of immunity, at the basis of which are to be found defensive reactions of the different cells of the organism. The variation of the leucocytic formula is the most easily demonstrated. Results from the author's experiments showed that it was possible to bring about this reaction in an animal by a simple external stimulus, such as the sound of a trumpet or the scratching of the ear, if this stimulus had been previously associated with repeated injections of the heated microbes. In his study of the rôle played by reflexes in the formation of antibodies in the blood, he obtained this formation by the simple intervention of the nervous system, that is to say by a conditioned stimulation without any injection of an antigen into the blood. Furthermore, he obtained a very complicated cellular reaction, viz., a peritoneal discharge was very definitely produced by the intermediation of the nervous system. He found in immunity that all cellular reactions became faster, more energetic, and more efficacious, that is, there was a reinforcement of sensitivity. Thus, in order to understand the question of immunity, Metelnikov thinks it is necessary to study the vital

activity, the sensitivity, and the memory traces in cells.—*Math. H. Piéron* (Sorbonne).

4734. *Mond, R., & Netter, H.* Ändert sich die Ionenpermeabilität des Muskels während sein Tätigkeit? (Does the ion permeability of the muscle change during its activity?) *Pflüg. Arch. f. d. ges. Physiol.*, 1930, 224, 702-709.—In this case there was no excess of potassium given off in the filtering. The assumption from this is that the permeability remained constant during the excitation.—*D. S. Oberlin* (Bryn Mawr).

4735. *Myerson, A., Lowman, J., Edwards, H. T., & Dill, D. B.* The composition of the blood in the artery, in the internal jugular vein and in the femoral vein during oxygen want. *Amer. J. Physiol.*, 1931, 98, 373-377.—Studies of the metabolic processes in the brain and in the legs during partial anoxemia have been made. The arterial oxygen content ranged from 48 to 77% of capacity and yet there was no accumulation of lactic acid or other fixed acid in either area. Blood leaving the brain was within the normal range in most subjects.—*C. Landis* (N. Y. Psychiatric Institute).

4736. *Netter, H.* Über die Durchlässigkeit von Drüsen, ein weiteres Beispiel selektiver Ionenpermeabilität. (Concerning the penetrability of glands, a further example of selective ion permeability.) *Pflüg. Arch. f. d. ges. Physiol.*, 1930, 224, 121-127.—The poison glands of the octopus were saturated with a salt solution, and during the filtering kept their power of secretion for an unusual length of time. The exchange between the solution and the glandular secretion explains the existence of a selectively permeable wall between the blood track and the gland walls. The shifting of ions has heretofore been studied only in the case of potassium. The mechanism of its occurrence has not yet been explained.—*D. S. Oberlin* (Bryn Mawr).

4737. *Oddone, A.* Teoria degli atti umani. (Theory of human acts.) Milan: Giuffrè, 1931. Pp. 222.—The author makes a distinction between the natural act, the spontaneous act and the voluntary act, the only one which proceeds from the rational spirit; that is to say, the will, with intellectual cognition of the end. He then passes to the study of the extrinsic principle of human acts, examining the concept of the general law, the different kinds of laws, the positive divine and human law. As the law is the objective and general rule of human acts which must be applied to particular and concrete cases, the conscience is the next rule, or the intrinsic and subjective principle. Thus he defines the moral conscience, its origin, functions and value, and he sums up the natural and supernatural means by which it becomes well educated, certain and fully right. This book contains in introduction a discussion of Christian morals and moral philosophy.—*V. D'Agostino* (Turin).

4738. *Peak, H.* Modification of the lid-reflex by voluntarily induced sets. *Psychol. Monog.*, 1931, No. 1. Pp. 68.—A study of the influence of three pre-stimulus conditions or "sets" upon the amplitude, latency, variability, and integration of the lid-reflex response. In the relaxation set the subject

was instructed to relax as much as possible; in the lid-voluntary set he was instructed to wink voluntarily to the auditory stimulus, which was designed to elicit the lid-reflex itself; in the finger-voluntary set he was to press a telegraph key to the same auditory stimulus. The experimental set-up included (1) the stimulus device, consisting of four spring snappers devised to produce four intensities of sound, (2) a microphone and Dodge telephone recorder by means of which the moment and the intensity of stimulation were photographically registered, (3) a lever which rested on the eyelid and which supported a concave mirror for reflecting the moving beam of light caused by the lid movement, (4) a vibrating time marker for casting shadows on moving photographic paper, and (5) a moving plate, carrying the photographic paper. The author found it convenient to distinguish between qualitative alterations, as indicated by the various configurations of the lid records made by her subjects, and quantitative alterations, consisting of changes in amplitude and in time of response. A pattern characterized by short latency, prompt rise to maximum closure, and prompt onset of opening tended to occur in relaxation; the two voluntary sets modified this pattern in the direction of longer time of closure and irregularity of response. Such results suggest that under certain experimental conditions the pattern of the response may serve as a criterion for differentiating between a reflex and a voluntary lid-response. In order to obtain homogeneous records, the author selected this response pattern from all of the sets for quantitative analyses. It was found that the amplitude of the lid-reflex is larger under the voluntary sets than the relaxation set; the exceptions to this suggest that over-effort is inhibitory. In general, the locus, the intensity, and the temporal relationship of the concurrent activity and the reflex are factors which determine the modification of the reflex. The two voluntary sets increase the variability in the amplitude of response. The time results were not consistent, but apparently they indicate that the latent time of the reflex is longer under the voluntary sets. The author concludes the study with some methodological suggestions.—*F. A. C. Perrin* (Texas).

4739. Prost, P. *Réflexes psychologiques. Leur importance, leur maîtrise.* (Psychological reflexes; their importance and their mastery.) *Psychol. et vie*, 1931, 5, 83-85.—*Math. H. Piéron* (Sorbonne).

4740. Rodrigues, G. *La tâche du réflexe.* (The task of the reflex.) *Psychol. et vie*, 1931, 5, 78-80.—The reflex controls action; to act is to react; in a sense one might say that education is the art of making the conscious pass into the unconscious. Reflection is at the beginning; the reflex is at the end.—*Math. H. Piéron* (Sorbonne).

4741. Schubert, G. *Über die physiologischen Auswirkungen der Corioliskräfte bei Trudellbewegung des Flugzeuges.* (On the physiological effects of the centrifugal forces during the spinning of aeroplanes.) *Acta Oto-Laryngol.*, 1931, 16, 39-47.—*M. B. Mitchell* (George School, Pa.).

4742. Schwartz, A., & Guillaume, J. *Recherches*

*expérimentales sur les relations entre la sensibilité musculaire et la motilité volontaire.* (Experimental researches on the relations between muscular sensitivity and voluntary motility.) *Sci. méd. pratique*, 1930, 5, 138-141.—Our musculature reinforces those sensory elements which react to deformations experienced by the muscular tissue. They constitute on the one hand the subjective impressions which inform us of our attitudes and movements, and on the other hand the proprioceptive reflexes such as the tonus reflex, the tendinous reflexes, and Sherrington's myostatic reflexes. The authors investigated the question whether natural muscular deformations such as those resulting from voluntary muscular activity are capable of initiating these same reflexes. Starting from the hypothesis that impulses conditioning voluntary muscular contractions originate from a double source, one central and the other peripheral (proprioceptive), the authors tried to suppress this second source and to emphasize the rôle of the proprioceptive reflex which they had suppressed through a diminution of the intensity of contraction, using novocain to abolish at will the muscular sensitivity. Under these conditions, in spite of the subjects' efforts to contract their muscles as intensely as before the anesthesia of the muscle, the tenseness of the latter was only slightly greater than that of the muscle in repose. The authors likewise worked with the electromyographic method. Their results establish the fact that a sudden suppression of the muscular sensitivity by a local anesthetic brings about a diminution of the energy of the voluntary muscular contraction for which the subject is not able to compensate. The authors believe that they have found herein the proof that under normal conditions the reflex impulses, which can be proprioceptive only and initiated of necessity by the voluntary activity itself, are added to the cortical influx for the purpose of sustaining and reinforcing it.—*Math. H. Piéron* (Sorbonne).

4743. Smull, M. L., Raubenheimer, A. S., Baldwin, F. M., Webb, R., Harker, E., Huxtable, Z., & Abernethy, M. *Certain physiological changes accompanying prolonged mental reaction.* *Proc. Soc. Exp. Biol. & Med.*, 1930, 28, 34-35.—Three subjects were given the task of multiplying 4-digit numbers from memory for periods of 1, 4, 8, and 12 hours, each on 4 successive days; and tests were made of metabolic rate, erythrocyte and leucocyte count, hemoglobin content, and urine analyses. Control tests were made without mental effort. Metabolic rate showed a slight rise on the second day of the 12-hour period, continued well above basal rate on the third day, and rose to a high level on the fourth day. Urine tests showed normal specific gravity with no trace of sugar or albumin. Acetone was positive after the first day, but there was no trace of di-acetic acid. No significant change appeared in hemoglobin content, and blood counts showed normal fluctuations.—*H. R. Thompson* (Stanford).

4744. Sollier, —, & Drabs, —. *De la prévision de la perfectibilité des aptitudes motrices.* (On prediction of the perfectibility of motor aptitudes.) *Rev. sci. du trav.*, 1930, 2, 375-400.—The authors



discuss complex work into which enter, aside from factors of precision and speed, intellectual and ideomotor factors. They show the rôles of conceptual and ideomotor judgment, which must be distinguished from each other from the point of view of the moment of intervention; they end by supposing that educability in varied work is determined rather by the capacity of assimilating experience than by motor capacity.—*Math. H. Piéron* (Sorbonne).

4745. Surber, P. *Reaktionen auf Schallreize*. (Reaction to sound stimuli.) Zurich: Leeman, 1931. Pp. 49. M. 2.00.—Using Wundt's *Physiological Psychology* as a guide, apparatus and investigations on reaction conducted on pupils of the *Volkschule*, aged 6-14, are described; and as supplementary observations, investigations upon children of the kindergarten, aged 4-5, and upon students, both male and female, aged 20-30, were carried on. It was found advantageous to use a reaction key, by means of which the reaction was registered by pressing down instead of letting go of the key. Each subject, after 2 preliminary trials of 20 reactions, went through a series of 20 reactions for five consecutive days. By using G. E. Lipps' method of obtaining mean values, the reaction times were characterized by the mean values given below. ( $A$  = arithmetical mean of the observations;  $E_2$  = the square root of the arithmetic mean of the squared deviations of the values of  $A$ ;  $E_3$  = the cube root of the arithmetic mean of the cubed deviations;  $E_4$ :  $E_2$  = the quotient of the arithmetic mean of the biquadratic deviations divided by the second power of  $E_2$ .) In the following tables each mean value represents the arithmetic mean of the mean values of the arrays:

| Age   | $A$          |              | $E_2$ |      | $E_3$ |      | $E_4:E_2$ |     |
|-------|--------------|--------------|-------|------|-------|------|-----------|-----|
|       | K            | M            | K     | M    | K     | M    | K         | M   |
| 7     | 144 $\sigma$ | 177 $\sigma$ | 10.7  | 14.4 | +1.8  | +6.7 | 2.4       | 2.7 |
| 8     | 156          | 149          | 10.0  | 8.8  | +2.6  | +2.8 | 2.6       | 2.9 |
| 9     | 141          | 139          | 8.7   | 8.8  | +3.0  | +1.0 | 2.3       | 2.8 |
| 10    | 125          | 127          | 8.4   | 8.5  | +0.2  | +2.1 | 2.6       | 2.6 |
| 11    | 112          | 126          | 7.5   | 7.4  | +1.0  | +1.4 | 2.5       | 2.6 |
| 12    | 110          | 115          | 7.0   | 8.6  | -1.5  | -1.0 | 3.1       | 2.5 |
| 13    | 104          | 119          | 7.6   | 7.9  | -3.5  | -0.2 | 2.8       | 2.5 |
| 14    | 104          | 113          | 7.7   | 6.8  | -1.8  | +1.1 | 2.9       | 2.4 |
| Adult | 104          | 112          | 6.5   | 5.9  | +0.7  | +0.6 | 3.3       | 2.5 |

Up to this time, the reaction investigations have been carried on only with adults, who were put into these categories according to their reactions (total, sensory and muscular). The presentation of the reaction-time series by averages makes possible a more adequate examination of the reaction-time arrays. A progressive change in the reaction time appears. It consists in pronounced advance to reactions that are shorter on the average, in the decrease of the variability ( $E_2$ ) and in the transition from positive to negative asymmetry ( $E_3$ ). The average clustering around the values of  $A$  show no progression.—*P. Surber* (Zürich).

4746. Syrkin, —. *La question de la convergence ou de la divergence sous l'aspect de la variabilité fluctuante*. (The question of convergence or divergence in terms of fluctuating variability.) *Rev. sci. du trav.*, 1930, 2, 353-365.—The author seeks to

find out whether practice has the effect of levelling differences between subjects of unequal initial ability (convergence), or whether, on the contrary, exercise only serves to heighten the difference between the good and bad (divergence). The author establishes that if, up to now, reliable solutions have not been found, it is because of the fact that the tests employed are insufficiently coherent, and he establishes by rigorous demonstration that, in this case, results are obtained which must make it seem that the good have progressed less than the bad (convergence), when there should have been, in reality, perfect divergence.—*Math. H. Piéron* (Sorbonne). [See also abstracts 4689, 4707, 4750, 4752, 4770, 4934, 5008.]

#### PLANT AND ANIMAL BEHAVIOR

4747. Bose, J. C. *Le mécanisme nerveux des plantes*. (The nervous mechanism of plants.) (Trans. by E. Monod-Herzen, Paris: Gauthier-Villars, 1931. Pp. 228. 45 fr.—The investigations conducted by the author over a period of many years have established the identity of the physiological mechanism of the plant with that of the animal. This work is divided into 17 chapters. To begin with, the author indicates the reciprocal relations between distant organs and the continuity of conduction between the stem and leaves. He then explains the hydrodynamic theory of transmission and the current theory of transpiration and shows that the characteristics of the vegetable impulse are those of an excitation. He reviews the histological characteristics of the conductive tissue, the propagation of the excitation and its automatic registration, and the effects produced by different agents on the propagation of the impulse. Everything indicates that conduction is probably modified in the same manner and by the same mechanisms as in the animal nerve. As in the animal, there is a sensory and a motor impulse in the plant. The author also considers the existence of a nervous center which, unfortunately, he has not yet been able to place in evidence.—*Math. H. Piéron* (Sorbonne).

4748. Castle, E. S. *The phototropic sensitivity of Phycomyces as related to wave-length*. *J. Gen. Physiol.*, 1931, 14, 701-711.—The author finds, by means of a method which is described, that the sporangiophores of *Phycomyces* are most sensitive to stimulation by light in the violet between 400 and 430  $m\mu$ . Sensitivity falls to nearly zero toward the red, while in the near ultra-violet it is still high. These results differ from the earlier ones of Blaauw in that they place the point of highest sensitivity some 80  $m\mu$  nearer the red end of the spectrum. It is pointed out that, because of the presence of accessory pigments, care should be used in identifying such results with the absorption spectrum of the photosensitive material.—*C. H. Graham* (Johnson Foundation, Pennsylvania).

4749. Gibault, J. *Recherches sur l'orientation du pigeon voyageur*. (Researches on the orientation of the carrier pigeon.) *Asso. fr. avance. sci., c. r. cong. d'Alger, Session 54*, 1930, 250-252.—Gibault discusses certain researches carried out at an experi-



mental dovecote owned by the Institut de Physique du Globe de Paris on untrained pigeons of good stock which were acquainted only with the environs of their pigeon-house. These birds were released individually from 200 to 300 kilometers from their home. Under these conditions only a small minority returned, and they came back very slowly. The author believes that vision is involved in the return to the nest.—*Math. H. Piéron* (Sorbonne).

4750. **Heidgen, M. F., & Barnard, R. D.** The maintenance of iris sphincter tone in the rat. *Amer. J. Physiol.*, 1931, 98, 276-278.—“The iris control in the rat differs from that of the dog, rabbit, and man in having a mechanism the tone of which is controlled, in part, by sensory impulses arising in the cornea, conjunctiva and periorbital tissues. The effect of surface active substances in causing mydriasis after local application is due to their anesthetic properties.”—*Z. Piotrowski* (N. Y. Psychiatric Institute).

4751. **Hooker, D.** Physiological reactions of goldfish with severed spinal cord. *Proc. Soc. Exp. Biol. & Med.*, 1930, 23, 89-90.—The cords of 25 fish were severed near the dorsal fin, under chlorotone. All retained the ability to swim, using the anterior musculature, but cord section does not cause the fish to lie on their sides, contrary to the statement of Koppányi. Light tactile stimulation gives no response, and stronger stimulation produces swimming in normal fish, and in spinal fish when applied anterior to the lesion. In every case tactile stimulation posterior to the lesion results in a typical avoiding reaction which is found only in spinal fish. Histological examination showed no evidences of spinal regeneration.—*H. R. Thompson* (Stanford).

4752. **Huizinga, E.** Untersuchungen über die galvanische Reaktion des Vestibularapparates bei der Taube. (Experiments on the galvanic reaction in the vestibular apparatus in the pigeon.) *Pflüg. Arch. f. d. ges. Physiol.*, 1930, 224, 569-586.—The galvanic experiments in normal doves showed results similar to the work described by Jensen, but deviations of the head greater than 90° were not observed. The slow tonic deviation of the head, in the case of weak current, was quite characteristic. With double extirpation of the labyrinth, the reaction was normal to currents of low intensity, the reaction decreasing gradually. The explanation was that of degeneration of the vestibular nerve. In the case of single extirpation, the cathode and anode gave like results. Removing one part of the labyrinth did less damage than complete removal of the labyrinth. After degeneration has set in, a normal galvanic reaction is produced in both the pars inferior and the pars superior.—*D. S. Oberlin* (Bryn Mawr).

4753. **Imms, A. D.** Social behavior in insects. New York: Dial Press, 1931. Pp. x + 117. \$1.50.—Of interest to research workers as well as to general students. Discusses the beginnings of “social instincts” in insects as a whole; then in detail considers the social behavior of wasps, bees, ants, and termites; finally provides chapters on social parasitism and caste production. The degree of social be-

havior correlates with superior nervous structure and what may be termed “intelligence.” Social insects manifest “adaptability to meet circumstances” and “organic memory.” Dangerous over-reproduction is controlled by limiting it to a few individuals. This caste system extends even further into the separation between workers and soldiers among ants, and the progressively different occupations engaged in by bees as their age increases. Social insects manifest surprising ability to control matter (e.g., in building, and in fungus-farming) and other insects (e.g., trophobionts, or domesticated parasites). There is manifest considerable skill in storage of food and in means of communication and defense. The caste system obtained long before the primates had developed. Possible causes of polymorphism are considered. An appendix on literature is supplied.—*O. L. Harvey* (Cambridge, Mass.).

4754. **Schaltenbrand, G., & Cobb, S.** Clinical and anatomical studies on two cats without neocortex. *Brain*, 1930, 53, 449-488.—Two cats without neocortex are described clinically and anatomically. In the first both cerebral hemispheres were removed anterior to the thalamus. It exhibited states of waking and sleep, and when awake made purposeless circus movements. It did not eat spontaneously. In the other cat, the rhinencephalon and striatum were left intact. It reached and ate its food spontaneously and for a time it had polydipsia, polyphagia, and polyuria. It developed a shaking reflex of the extremities and cleaned its fur; its motor activity was greater than that of a normal cat. Rotational nystagmus and after-nystagmus were studied and followed the same rules as in intact animals and man. Electrical stimulation, after the animal was killed, of those portions of the brain which remained revealed two points which were excitable; the anterior commissure, which gave rise to movements relating to smelling and eating, and a second point lying above a small comma-shaped nucleus in the velum medullare, stimulation of which caused urination and changes in the respiratory rhythm.—*V. M. Jones* (Boston Psychopathic Hospital).

4755. **Telkes, M.** Bioelectrical measurements on amoebae. *Amer. J. Physiol.*, 1931, 98, 475-483.—By means of microelectrodes the potential difference between the interior of the amoeba and its exterior medium was measured. It has been shown that the cytoplasm is negative while the medium is positive. These potential differences are altered by the addition of salt solutions. In certain concentrations calcium or magnesium chloride reverse the difference. A marked correlation between the potential difference and the viability of the amoeba was found.—*C. Landis* (N. Y. Psychiatric Institute).

4756. **Warner, L. H.** The present status of the problem of the orientation and homing of birds. *Quar. Rev. Biol.*, 1931, 6, 208-214.—“In summarizing it should be emphasized that no one of the four hypotheses advanced or even a combination of these can be accepted as an adequate description of all homing behavior. Direct stimulation by the cote itself (hypothesis I) and maintenance of an orientation toward the cote during the outward journey

(hypothesis III) may apply to very short flights but can hardly apply to those over long distances. There is yet more evidence against than for sensitivity of birds to terrestrial magnetism (hypothesis II). The learning theory appears to be more generally applicable to homing behavior than do any others."—O. W. Richards (Yale).

4757. Wever, E. G., & Bray, C. W. Auditory nerve responses in the reptile. *Acta Oto-Laryngol.* 1931, 16, 154-159.—Foa and Peroni found that impulses conducted by the facial nerve of a turtle did not correspond to the frequency of the auditory stimuli. Thus their results were interpreted as favoring the Helmholtz theory of audition. Since they did not agree with Wever and Bray's work on the auditory nerve of the cat, the latter repeated their experiments on an available species of turtle—a much smaller variety than that used by Foa and Peroni. As in the case of the cat, the impulses detected in the nerve corresponded in frequency with the waves of the stimulating sound. This was true for all audible tones, but the range was much smaller than for the mammals used previously. Low tones and noises gave excellent responses, while only a low buzzing sound resulted from speech. Above 500 cycles per second, the intensity rapidly decreased until it usually became inaudible around 1000 to 1200 cycles. When the electrode was placed on the side of the medulla oblongata near the entrance of the eighth nerve or on the facial nerve in the same region, responses similar to those from the auditory nerve, but of less intensity, were obtained.—M. B. Mitchell (George School, Pa.).

[See also abstracts 4664, 4703, 4705, 4707, 4711.]

#### EVOLUTION AND HEREDITY

4758. Baur, E., Fischer, E., & Lenz, F. Human heredity. (3rd ed.) New York: Macmillan, 1931. Pp. 734. \$8.00.—(Not seen).

4759. Boldrini, M. Fertilità ed intelligenza. (Fertility and intelligence.) *Riv. int. di sci. soc. e discipline ausiliarie*, 1931, 2, 3-21.—(*Soc. Sci. Abst.* III: 16302).

4760. Luxenburger, H. Die Bedeutung der psychischen Hygiene für Erbkrankheiten. (The significance of mental hygiene for inherited diseases.) *Arch. f. Rassen- u. Gesellsch.-biol.*, 1930, 24, 307-325.—(*Bibliographia Eugenica*).

4761. Von Verschuer, O. Intellektuelle Entwicklung und Vererbung. (Intellectual development and inheritance.) *Vererbung u. Erziehung*, 1930, 176-207.—(*Bibliographia Eugenica*).

4762. Wilson, P. T. A study of like-sexed twins. Part II. Their health and disease records. *Human Biol.*, 1931, 3, 270-281.—Fraternal twins show more intra-pair differences than identical twins in most traits of health and in the incidence and severity of most children's diseases. A weight superiority in one member of a twin pair tends to be retained into the school period. In the combined experience of the mothers, a discriminate health difference during infancy bears no relationship to discriminate health

differences during the school period.—O. W. Richards (Yale).

[See also abstracts 4813, 4829, 4917, 4922, 4939, 4975, 4979.]

#### SPECIAL MENTAL CONDITIONS

4763. Allers, R. The psychology of character. (Trans. by E. B. Strauss.) New York: Macmillan, 1931. Pp. xv + 383. \$5.00.—A book of especial interest to Catholic psychiatrists and to clerical therapists of all denominations. Behaviorism and experimental psychology in general have gotten so far away from the study of the psyche that they should receive a new name, such as "metaphysiology" (translator's comment). Von Hartman, Freud, and their successors, however, have opened up a new approach to psychology. But their deterministic philosophy has alienated many a Catholic. "In my opinion, there is an unbridgeable gulf dividing the psychoanalytical and the Catholic theories of human nature." The work of Adler, however, is more likely to receive favorable attention from Catholics, to whom "a social philosophy founded on values and the Thomistic conception of the psycho-physical unity of man" is fundamental. The three main starting-points of this work, then, are: "the Catholic conception of the universe, the philosophical system of the *philosophia perennis*, and the empiricism of modern psychological investigation, especially as represented in the individual-psychology teachings of Alfred Adler," freed, however, from its non-essentials. According to this approach, the soul is "the locus of an unceasing conflict of the conquest of the will which is directed in two apparently opposite directions, towards self and towards society, or community." This conflict is in essence religious: "I have never yet come across a case of neurosis which did not eventually reveal as the ultimate conflict and problem an unsolved metaphysical problem." Concerning authority the author writes, "A man never outgrows the authority of the Church, which with the authority of the ever-living Christ proclaims those truths and laws which man as such and unaided cannot perceive." And concerning the rôle of the physician: "Not only has the physician no title to speak authoritatively on religious questions, but, above all, he has not at his command the supernatural means of which the priest makes use." There are chapters on: the nature of character, the genesis of character, character in childhood, the ideal of character, the characterology of the sexes, later years of childhood, abnormal and neurotic characters, self-knowledge and self-upbringing. There is no bibliography, but numerous references to Catholic literature. Case-study material is derived in the main from the lives of the Catholic saints.—O. L. Harvey (Cambridge, Mass.).

4764. Allevi, G. Gli stupefacenti. (Narcotics.) Milan: Hoepli, 1931. Pp. 303. Lire 15.—In the general section of this book, the author discusses the *modus operandi* of narcotics on the organism, the race and mortality; he treats of the extremely important question of toxicomania, considering the causes of its propagation and the best preventive

measures. The author discourses at great length on the eugenical and legislative significance of this problem. In the second, specific section, the following narcotics are more thoroughly dealt with: opium, morphine, heroin, ether, cannabis indica and cocaine. In his presentation the author takes into account the medicinal as well as the social side of the problem.—*A. Angyal* (Turin).

4765. [Anon.] **Selbstmord und Verbrechen infolge Hypnose?** (Suicide and crime as results of hypnosis?) *Arch. f. Krim.*, 1930, 87, 254-255.—The case of Martha G, who committed suicide, which act was interpreted by O. Goldmann as one done under the hypnotic influence of her presumed lover, is here regarded rather as the direct result of mental depression caused by discovery of the real character of the man. Hypnosis is not in this case a probable explanation.—*P. C. Squires* (Clinton, N. Y.).

4766. [Anon.] **Mord und Abtreibung durch Hypnose.** (Murder and abortion by means of hypnosis.) *Arch. f. Krim.*, 1930, 87, 255-256.—A case reported by a Paris physician to the effect that abortion can be produced through hypnosis.—*P. C. Squires* (Clinton, N. Y.).

4767. [Anon.] **Sittlichkeitsverbrechen an Hypnotisierten.** (Moral crimes against hypnotized persons.) *Arch. f. Krim.*, 1930, 87, 256-259.—Sex crimes are rendered easily possible under hypnosis; cases are given illustrating this point. But instances are also described showing how false accusations are sometimes brought by girls who have been hypnotized.—*P. C. Squires* (Clinton, N. Y.).

4768. [Anon.] **Verbrechen durch Hypnotisierte?** (Crime by hypnotized persons?) *Arch. f. Krim.*, 1930, 87, 259-260.—It has been maintained time and again that crimes may be committed under hypnosis. Reported cases are outlined; but when closely analyzed these cases have no certain interpretation.—*P. C. Squires* (Clinton, N. Y.).

4769. [Anon.] **Die Hypnose als Mittel zur Aufklärung strafbarer Handlungen.** (Hypnosis as a means for the detection of punishable acts.) *Arch. f. Krim.*, 1930, 87, 262-265.—Hypnosis as a means for the detection of guilt is legally valueless: under hypnosis the suspected criminal will typically fabricate all sorts of lies. The criminal will do his best to protect himself even in the condition of hypnosis.—*P. C. Squires* (Clinton, N. Y.).

4770. **Aveling, F. Personality and will.** New York: Appleton, 1931. Pp. x+246. \$2.00.—An investigation of the nature of will and personality. This is introduced by an historical sketch of the subject from early ethical and theological thought through the scientific transition to present experimental investigations. Instincts, sentiments, values, character and temperament, the self, and freedom and determinism are discussed. The book closes with the presentation of a theory of personality: "... a person is an individual incommunicably existing in himself, who is not merely will, or energy elicited by goals and determined by motives, but an intelligent will contemplating means to ends and making its own motives."—*D. Shakow* (Worcester State Hospital).

4771. **Beeley, A. L. Freud and psychoanalysis.** *Soc. Service Rev.*, 1931, 5, 10-27.—(*Soc. Sci. Abst.* III: 16407).

4772. **Bénon, R. Les états seconds alcooliques.** (Secondary alcoholic states.) *Hôpital*, 1931, 19, 102-104.—Under the name secondary state are designated intellectual or psychological syndromes with a sudden beginning and ending followed by total amnesia. In reality, the author says, this secondary alcoholic condition with total amnesia and without concomitant drunkenness, fixation amnesia, characteristic mental confusion, or onirism is very rare and possibly does not exist.—*Math. H. Piéron* (Sorbonne).

4773. **Betgilel, L. Von kleinen Dingen und Gewohnheiten.** (Concerning details and habits.) *Psychol. Rundschau*, 1931, 3, 124-126.—The author comments on the importance of the small things in the personality make-up and the effect of these upon our companions. He cites a number of unpleasant personality traits and advises self-observation and self-correction as typical of the wholly free personality.—*A. B. Herrig* (Michigan Central State Teachers College).

4774. **Bien, E. Dreifache Deutung eines Traumes.** (Three-fold interpretation of a dream.) *Zentbl. f. Psychotherap.*, 1931, 4, 356-366.—The author analyzes the dream of a compulsive neurotic from the standpoints of three schools of depth psychology, those of Freud, Stekel, and Adler. He believes that the viewpoints are not so different as would appear at first sight; that they all interpret the patient in the same direction, but with emphasis on different factors; and that the problem of dream interpretation converges on the therapeutic possibilities. He contrasts the three points of view, and concludes that the active interpretation of Stekel has the broadest basis, and that it is a valuable instrument also for the explanation of analytic situations and for the handling of psychological situations arising during treatment. It is best adapted to analytical practice because of its simplicity and clarity, and above all by its close relationship to life.—*M. E. Morse* (Catonsville, Md.).

4775. **Bleuler, E. Suggestionenmechanismen.** (Mechanisms of suggestion.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1930, 127, 469-482.—In suggestibility the author recognizes an aspect of affectivity; it is based on affective resonance and is found already in animals. The unconscious psychic phenomena are of a determining character. Mechanisms of suggestion are on the same level as all affective mechanisms. Suggestion works with inhibition and facilitation like an affect. Since affectivity controls the association paths, suggestion also influences thinking. The two components of human conscious will, drive and motivation, are directed into the intended paths during suggestion, and thus the will itself is controlled. There is only a quantitative difference between hypnosis and suggestion in the waking state. Even the functions of the body are influenced by affectivity. By following a suggestion a person appears to be divided, yet he follows a natural tendency to split which occurs in principle in hysteria and



schizophrenia. Bleuler sees a generally valid pair of functions in the contrast splitting-unification or schizophrenia-unity. Suggestion strengthens the already present schizoid mechanism and is based on the general ability of the psyche to split. That suggestion can also control functions of the body shows that one cannot draw a boundary line between mind and body.—*S. Krauss* (Frankfurt a.M.).

4776. **Cailliet, E.** *Why we oppose the occult.* (Trans. by G. F. Cole.) Philadelphia: Univ. of Pennsylvania Press; London: Oxford Univ. Press, 1931. Pp. 200. \$2.00.—Occult phenomena and practices are not modern discoveries, but may be traced back to the earliest primitive cultures. They still occur among all peoples, civilized, barbarous and savage. Every homogeneous society at a certain stage of development possesses a body of collective mystical notions which play an important part in the life of the individual and of the group. Magic and the magician are most commonly associated with these notions. This mysticism includes the belief that the spirits of the dead exert profound influence upon living human affairs. The magician, the intermediary between the living and the powerful dead, himself acquires much power in the eyes of members of the group. He is instrumental in adding to the common belief that the influence of the dead on the living is only beneficent, the belief that this influence is also harmful; black magic is added to white magic. The rise of black magic, the belief in the association of evil with the occult, is responsible for the violent fear of the group toward the dead and their medium, magic and the magician. It is this fear which is considered the basis of the widespread and persistent hatred and opposition toward occult phenomena of every form, sorcery, witchcraft, modern spiritualism, etc. The violence of the religious, social and scientific opposition toward the occult, despite the apparently rational nature of this opposition, is attributed to the thinly veiled, ancestral dread of the "Evil One," with which the occult has so long been intimately associated.—*B. Casper* (Clark).

4777. **De la Vaissière, J.** *La théorie psychanalytique de Freud. Etude de psychologie positive.* (The psychoanalytic theory of Freud. Study of positive psychology.) *Arch. de phil.*, 1931, 8, No. 1. Pp. 101.—(*Soc. Sci. Abst.* III: 16409).

4778. **Dodge, R., & Kahn, E.** *The craving for superiority.* New Haven: Yale Univ. Press, 1931. Pp. vii + 69. \$1.50.—A conversational disquisition on values, adjustments, uniqueness of personality, variability, the craving for and feelings of superiority and inferiority, etc.—*R. R. Willoughby* (Clark).

4779. **Drabovitch, W.** *Le sort de la personnalité.* (The fate of personality.) *Rev. phil.*, 1931, 56, 404-423.—Study of different definitions of personality and its behavior, especially with regard to the ideas of P. Janet.—*Math. H. Piéron* (Sorbonne).

4780. **Endres, F. C.** *Vom Wesen des Symbols.* (Nature of the symbol.) *Psychol. Rundschau*, 1931, 3, 108-116.—The author sees in the study of symbolism a fruitful source of light on ancient cultures and religions. In his discussion attention is called

to the difference between the two methods of expression, the rationalistic, expressing ideas, and the symbolistic, expressing feeling. Contrast is shown between symbol and allegory and the field of each is explained.—*A. B. Herrig* (Michigan Central State Teachers College).

4781. **Forster, E.** *Selbstversuch mit Meskalin.* (Self-experiment with mescalin.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1930, 127, 1-14.—The author describes the hallucinations which he experienced during mescal intoxication. They agree with those described by Beringer in his monograph on mescal intoxication. Especially clear were optical distortions and a permanent change of visual acuity. Forster reaches original points of view in regard to the nature of the hallucinations, finding their cause in a clouding of consciousness, while on the other hand he takes the stimuli in the afferent organs to be of less importance.—*S. Krauss* (Frankfurt a.M.).

4782. **Furukawa, T.** *An experimental study of the relation between blood groups and mental dispositions, and its applications.* *Jap. J. Psychol.*, 1931, 6, 1-49.—The author asserts that there is a high correlation between blood groups and mental dispositions. According to his accounts, the blood groups O and B correspond to "active and dynamic" type of mental disposition, while the blood groups A and AB to "passive and static" type. So the proportion of these two types of blood groups in a certain community may indicate the general character of that community. Many illustrations are given on this point. Attention is also called to the applicative value of this theory to various practical problems, especially social and educational.—*S. Takagi* (Kyoto).

4783. **Glover, E.** *Sublimation, substitution and social anxiety.* *Int. J. Psychoanal.*, 1931, 12, 263-297.—Since 1923, the more complex and dynamic aspects of sublimation have been emphasized. The capacity for sublimation is congenitally variable and is also affected by acquired factors. The task of sublimation is an ego activity as much as is repression, but often sublimation may satisfy the claims of the ego without involving repression. Sublimation is not a single mechanism but a group of mechanisms, as at present conceived. Freud stressed the social, ethical and cultural values of sublimation, but it may be valuable, neutral, worthless or detrimental, according to the form it takes. Substitution should be understood as a less comprehensive term than displacement. Substitution, in Freud's later works, is considered synonymous with symptom formation. For clinical convenience, we may be able to classify substitutions as normal character formations, neurotic character formations, obsessional formations and reaction formations such as are seen in hysteria. The concept of sublimation is still not very clear, and is confused by the relationships between sublimation and such other mechanisms as displacement, symptom formation, inhibition, and symbolism. The idea of cultural or social valuations only increases the confusion regarding sublimation; it would be safer to evaluate sublimations as protective or defensive functions which prevent neurotic regressions. Then a sublimation could be regarded



as of social or cultural significance when the individual protection from illness takes the form of cultural pursuits. But preoccupation with cultural activities is often associated with anxiety, therefore we must distinguish between sublimations and open anxiety formations or concealed obsessional formations. Where anxiety is present, we do not have a true sublimation but a substitute formation with a return of the repressed. It may be difficult to make this distinction except through analysis, in which we can see the effect of releasing repression. Certainly we may query the significance of a sublimation so long as the individual is in any degree incapacitated, unhappy or ill.—*P. Blanchard* (Philadelphia Child Guidance Clinic).

4784. *Hellwig, A. Die "Hellseher" bei der Aufklärung der Düsseldorf Mordtaten.* (The "clairvoyants" and the solution of the Düsseldorf murders.) *Krim. Monatsh.*, 1931, 5, 171-173.—In the famous Kürten case the Düsseldorf police received about 300 letters from so-called clairvoyants giving advice as to how the criminal might be apprehended. The "clairvoyant" Hanussen is of particular interest in connection with this matter. In 1929, after the commission of one murder, he predicted that 14 others would follow; actually, there were nine murders in all. In 1930 he gave out to the newspapers 26 particulars concerning the as yet unapprehended murderer. But upon the capture of the murderer Kürten it was found that not one of these "clairvoyantly" obtained particulars was correct. Hanussen serves as an outstanding example of the absurdity of attempting to solve criminological problems by means of "clairvoyance."—*P. C. Squires* (Clinton, N. Y.).

4785. *Hendrick, I. Ego defence and the mechanism of oral ejection in schizophrenia: the psychoanalysis of a pre-psychotic case.* *Int. J. Psychoanal.*, 1931, 12, 298-325.—Case of a 25-year-old woman, who without treatment would soon have become psychotic. Psychoanalytic treatment was carried on over a period of ten months. Material is presented to show the mechanisms operating: father fixation, castration complex, failure of repression, inadequacy of sublimation, narcissism and schizophrenic regression, hypochondria and megalomania, oral ejection.—*P. Blanchard* (Philadelphia Child Guidance Clinic).

4786. *Kretschmer, E. The psychology of men of genius.* (Trans. by R. B. Cattell.) New York: Harcourt, Brace, 1931. Pp. xx + 256. \$4.50.—This book analyzes the personalities of those people who through the histories of science, philosophy, literature, politics, art and religion have won the name of genius. Kretschmer supports the point of view that genius and madness are closely related, and illustrates his arguments with many examples of psychopathic personalities in men of undoubted genius. According to this, inherited psychopathic dispositions and great talent combined are the causes for genius. Genius occurs most frequently where there has been a cross-breeding of two highly bred lines. The classification into pyknic and leptosome types is pointed out and their correspondence with types of

intellectual performance is stressed. In support of this last relationship a classified portrait collection is presented.—*K. W. Oberlin* (Delaware).

4787. *Kunz, H. Die Psychoanalyse als Symptom einer Wandlung im Selbstverständnis des Menschen.* (Psychoanalysis as a symptom of a change in man's understanding of himself.) *Zentbl. f. Psychotherap.*, 1931, 4, 280-302; 366-379; 408-425; 481-512.—A metaphysical and controversial study of the fundamentals of psychoanalysis. The author's thesis is that there is at present a crisis in psychoanalysis, which will be resolved through the clearing-up of the long-hidden metaphysical foundations on which it rests, and by attaining new perspectives of meaning. Only thus will it be freed from Christian and idealistic traditions and from its own peculiar bonds, and take its place among present philosophical, anthropological, and psychological disciplines. Only thus can its fundamental character as an interrogation of human existence be grasped and secured—an interrogation which is radical, unproved, and continually threatened by annihilation.—*M. E. Morse* (Catonsville, Md.).

4788. *Lepeschkin, W. W. Death and its causes.* *Quar. Rev. Biol.*, 1931, 6, 167-177.—A discussion of the concept of death and its causes.—*O. W. Richards* (Yale).

4789. *Lhermitte, J. Le sommeil.* (Sleep.) Paris: Colin, 1931. Pp. 211. 10.50 fr.—The author first reviews the studies on the topic. In the first part he treats of physiological sleep. He indicates the phenomenology of normal, hibernal, and seasonal sleep. In the second part he describes the mechanisms of sleep from the biological and physiological angle, and considers the regulative tendency of sleep. In the third part he speaks of the dream, of the nature of oniric imagery, and of the association of images in the dream. He also tells how dreams are organized and of their physiological base. The last part treats of perturbations of sleep: confusional states and somnambulism, the narcoleptic syndrome with narcoleptic onirism, cataplexy, and the different narcolepsies of infectious and traumatic endocrine origin. He then gives the known facts on experimental and morbid insomnia. A bibliography concludes the work.—*Math. H. Piéron* (Sorbonne).

4790. *Lindemann, E. The psychopathological effect of sodium amytal.* *Proc. Soc. Exp. Biol. & Med.*, 1931, 28, 864-866.—An investigation was conducted to determine whether the results of sodium amytal injection, as reported by Lorenz and Bleckwenn, may be explained on the basis of the narcosis produced. By the administration of small doses, similar behavior changes were obtained in the absence of narcosis. Injection of 3 to 4½ grains in 4 normal individuals and 24 schizophrenic, cyclothymic, and psychoneurotic patients produced parietic speech defects, nystagmus, eye coordination disturbances, mild ataxia, and increase in pain, smell, and taste thresholds. Normal individuals showed mild euphoria and a reduction of normal inhibitions in speech. The patients gave similar reactions: catatonies who had been mute for months lost their rigidity and cataleptic symptoms, and became quite communica-

tive. No change was noted in delusion systems or perceptive distortions.—*H. R. Thompson* (Stanford).

4791. **Lorand, A.** *Aggression and flatus.* *Int. J. Psychoanal.*, 1931, 12, 368.—The meaning of preoccupation with flatus in a 20-year-old male patient is explained as satisfying aggressive and narcissistic tendencies.—*P. Blanchard* (Philadelphia Child Guidance Clinic).

4792. **Mager, H.** *Les sourciers et leurs procédés.* (Dowsers and their procedures.) Paris: Dunod, 1930. Pp. 390. 50 fr.—In the first part of the book, the author mentions the ancient rod and pendulum diviners, and describes the procedure of each of the most famous diviners of three centuries. In the second part the new procedure of the author, depending upon the discovery of the color method of detection, is explained. The author says that the apparatus which is used can catch vibration waves by which all bodies and quanta of energy manifest themselves, thus allowing very rapid prospecting.—*Math. H. Piéron* (Sorbonne).

4793. **Malamud, W., & Linder, F. E.** *Dreams and their relationship to recent impressions.* *Arch. Neur. & Psychiat.*, 1931, 25, 1081-1099.—47 patients were studied in this investigation. The diagnoses varied, but they were mostly psychoneuroses, affect disorders, and schizophrenias. The experimental method used was that of showing a patient a picture and asking him to describe it. His dream during the following night was recorded, with the description of the picture. There were varying degrees of success in these analyses, but relationships between the mechanisms of the development of the disease and the data obtained in the experiments were in most cases strikingly evident.—*V. M. Jones* (Boston Psychopathic Hospital).

4794. **Mandeville, A.** *Le sang-froid.* (Self-possession.) *Psychol. et vie*, 1931, 5, 87-88.—*Math. H. Piéron* (Sorbonne).

4795. **Masaki, M.** *Studien ueber die menschlichen Typen. I.* (Typological studies of human characters. I.) *Jap. J. Psychol.*, 1931, 6, 51-74.—129 college boys are tested by means of the Kibler's and the Scholl's tables and divided into cyclothymic, schizothymic, and intermediate types through their own judgments. Three questions, which shall tell us respectively the typical differences in personal attitudes toward other persons, situations, and one's own experiences, are given to the evidently typical cyclothymics and schizothymics among the tested boys and it is examined whether there is an agreement between the character types and these personal attitudes or not. A fairly good parallel is found, especially in cyclothymics. The author concludes this paper with the study of the relations between the character types, particularly in their developmental aspects, and environment by means of his own questionnaire-method.—*S. Takagi* (Kyoto).

4796. **Mills, C. A., & Senior, F. A.** *Does climate affect the human conception rate?* *Arch. Int. Med.*, 1930, 46, 921-929.—(Bibliographia Eugenica).

4797. **Paikin, M. I.** *Zur Frage der Anwendung von hypnosuggestiver Therapie bei Hyperemesis*

*Gravidarum.* (The use of hypnotic suggestion in hyperemesis gravidarum.) *Zentbl. f. Psychotherap.*, 1931, 4, 273-280.—The fact that many investigators consider the pernicious vomiting of pregnancy as a toxiosis, and at the same time recommend psychotherapy for it, leads to the conclusion that the successful use of this treatment does not settle the question in favor of an exclusively psychogenic origin. It may be a reaction of the vegetative nervous system to various injurious agents, either toxins or a pathologically conditioned, i.e., "psychogenic," reflex. The interpretation of psychogenic vomiting during pregnancy as a symbol of rejection is not to be summarily dismissed. It has been known for a long time that suggestion can influence not only the higher functions of the nervous system but also the somatic processes. The conditioned reflex offers a physiological explanation for this. The author reports 11 cases of the toxic vomiting of pregnancy treated by hypnotic suggestion—8 successfully, 2 without result, and one with partial success. Improvement was usually manifest after the first session. In the unsuccessful cases, hypnotic sleep could not be induced; ketonuria was also present. In none of the cases was inquiry made as to psychogenic factors. The author considers, nevertheless, that his results prove that purely symptomatic psychotherapy has an important place in the treatment of hyperemesis gravidarum.—*M. E. Morse* (Catonsville, Md.).

4798. **Petri, O.** *L'eterno ritorno. Spiritismo scientifico come identità personale.* (The eternal return. Scientific spiritualism as personal identity.) Turin: Bocca, 1930. Pp. vii + 173.—This book relates to two other publications of the author, *The return of F. Nietzsche. An attempt at mediumistic communication* (Turin: Bocca, 1927), and *The personality of a spirit. The subconscious and spiritualism* (Turin: Bocca, 1929), in which Petri tried to explain the biologic origin and the psychic construction of the spiritualistic phenomenon. Here he describes new seances held at Rome between October and July, to confirm the fact that this phenomenon is due to the emergence of the subconscious obtained by means of a sort of hypnotic sleep. Our subconscious is only the wisdom of our cells, each one of which has a physical and psychic life which explains itself in the protection and defense of itself, that is to say, the conduct of the cells which Darwin illustrated in a marvellous and incontrovertible manner.—*V. D'Agostino* (Turin).

4799. **Phelps, W. L.** *Human nature.* New York: Dutton, 1931. Pp. 51. \$1.00.—Variety of human relations and interest in a variety of subjects enrich and lengthen life. Human nature, being an inexplicable mystery, is the most interesting of studies. No individual understands another, but with increasing age he acquires tolerance and intellectual sympathy, or the capacity to enter without prejudice into another's state of mind.—*M. P. Montgomery* (Faribault, Minn.).

4800. **Ruscheva, S.** *Razmishleniya vurkhu uchi-vost' ta.* (Reflection on politeness.) *Fil. Pregled.*, 1930, 2, 43-47.—(*Soc. Sci. Abst.* III: 16268).

4801. **Schulte-Vaerting, H.** Die rezessiven Erbmassen werden im Traum zu Dominanten. (Recessive heritage masses become dominant in the dream.) *Psychol. u. Med.*, 1930, 4, 214-218.—The author's theory is that within every human being a large number of different hereditary types lie dormant. The type that is dominant grows fatigued during the day, and in sleep it rests, becoming recessive, while some one of the other types rises to temporary dominance in the dream. Among these is the infantile type. The peculiarities of the child, its intelligence, its way of looking at things, etc., may all return to the adult during dreams. The longings, joys, and fears of childhood are in the foreground. But the childish type is not the only one that can return in dreams. Animal types also recur. The author interprets dreams of flying as evidence of some flying pre-human ancestor. Criminal *Anlagen* are also present in every human being, and these frequently become dominant in dreams. Activities which modern civilization stigmatizes as criminal were regarded as perfectly normal and proper by our primitive ancestors, and in our dreams they may seem normal to us. A person who is sexually normal in waking life may become neuter in dreams, like a worker bee. One likewise loses clear self-consciousness in a dream, and may seem to be two or more persons at the same time. When one has had the same dream very frequently one may seem to remember it as an actual occurrence of daily life. The recessive hereditary types become dominant in dreams, but not in dreams alone. Under suitable circumstances, one of these recessive types may assume dominance of waking life.—*M. F. Martin* (West Springfield, Mass.).

4802. **Thurstone, L. L.** The measurement of change in social attitude. *J. Soc. Psychol.*, 1931, 2, 230-235.—Children in two comparable schools were tested for their attitude toward the Chinese by means of an attitude rating scale such as that described elsewhere by the writer. They were then shown motion pictures, the children of one school seeing a picture favorable to the Chinese, the children of the other one unfavorable. Upon retesting, the children of the former group were found to have changed their attitude considerably, the difference between the two tests being 17 times its P. E. The children of the latter school changed in the opposite direction by an amount equal to 2.22 times its P. E. Thus it was shown both that attitude might be changed by one such experience, and that this change in attitude was measurable by these methods.—*E. B. Newman* (Frankfurt).

[See also abstracts 4646, 4651, 4668, 4695, 4805, 4815, 4855, 4858, 4877, 4897, 4906, 4920, 4931, 4932, 4970, 4974, 4982, 5006.]

#### NERVOUS AND MENTAL DISORDERS

4803. **Alajouanine, T.** Les troubles sensitifs de la sclérose en plaques. (Sensory disorders in multiple sclerosis.) *Méd.*, 1931, 12, 129-136.—Certain sensory subjective disorders grouped in a characteristic complex (such as the association of prickling and numbness with a sensation of heavy pressure

from the side, electric paresthesia, and constrictive pain) are frequently observed during the course of the first stages of multiple sclerosis. They consist chiefly in paresthesia, rarely in pain. The sensory objective disorders, which are less constant, have nothing particular in common with the exception of astereognosis. The sensory disturbances as a whole give evidence of important progressive invasion.—*Math. H. Piéron* (Sorbonne).

4804. **Abély, P., Passek, V., & Roger, J.** Recherches sur le fonctionnement de l'hypophyse au cours de la psychose maniaque dépressive (extension de la réaction de Zondek). (Research on the functioning of the hypophysis during manic-depressive psychosis (extension of the reaction of Zondek). *Ann. méd.-psychol.*, 1931, 89, 163-167.—Urine from manic-depressive patients injected into young male rats caused a violent reaction in their genital tract. This took the form of a hypertrophy during the first two weeks, followed by an atrophy during the third week.—*M. B. Mitchell* (George School, Pa.).

4805. **Allers, R.** Ueber plötzliche Veränderung des Characters. (Concerning sudden changes of character.) *Vjsch. f. Jugendk.*, 1931, 1, 137-140.—A report of the development of impulsive and unmotivated conduct in a previously normal 13-year-old girl, following an illness characterized by encephalitic symptoms, probably epidemic encephalitis. The author believes that even post-encephalitic conduct disorders may be influenced by suitable and individualized pedagogic treatment. The organic disturbances have also a psychogenic aspect, i.e., the consciousness of some obscure change in the personality causes a reaction in the form of a neurosis. It is extraordinarily difficult and requires long observation to decide how much is due to the organic brain disease and how much is psychogenic.—*M. E. Morse* (Catonsville, Md.).

4806. [Anon.] Psychotic questionnaire. Chicago: Stoelting, 1931.—A form intended for use in the examination of delinquents who are suspected of being also psychotic; based on a number of suggestive questions that are likely to uncover deep-rooted conflicts, obsessions, and the like.—*L. A. Averill* (Worcester State Normal School).

4807. [Anon.] Nu gällande bestämmelser angående annonsering av specialitet. (Present rules regarding the title of specialist.) *Svensk. läkart.*, 1931, 28, 1169-1176.—Among the new rules for using the title of specialist in the various fields of modern medicine, the Swedish medical society has adopted the following: Specialist in nervous diseases: three years training beyond the M.D. degree, of which one year neurological internship or its equivalent, one year at a psychiatric clinic (or equivalent), one year general internship. Specialist in mental diseases: three years of training beyond the M.D., of which two years at a hospital for mental diseases, one-half year neurological internship, one-half year general internship.—*M. L. Reymert* (Mooseheart Laboratory for Child Research).

4808. **Bachelard, P. M.** Can we diagnose feeble-mindedness in children? *Austral. J. Psychol. &*



*Phil.*, 1931, 9, 120-139.—(*Soc. Sci. Abst.* III: 16261).

4809. Badonnel, —, & d'Heucqueville, G. Episode méningé révélé par un syndrome d'action extérieure chez un bacillaire cavitare. (Meningeal episode revealed by a syndrome of exterior action with a scapolite cavity.) *Ann. méd.-psychol.*, 1931, 89, 149-154.—A patient with tuberculosis developed hallucinations and became paranoid.—M. B. Mitchell (George School, Pa.).

4810. Baruk, H., & Jankowska, H. Les réactions émotives dans l'hébéphrénocatatonie. (Emotional reactions in hebephreno-catatonia.) *Encéph.*, 1931, 26, 314-329.—The first impression obtained from an observation of hebephreno-catatonic patients is one of profound indifference consisting of motor, psychological, and affective inertia. The authors show from clinical observations that this opinion is only an illusion both from the affective and the motor points of view, for emotional reactions in these patients are elicited by many factors. A psychological analysis and exploration of the affective complexes aid greatly our comprehension of the content and causal conditions of emotional reactions, but such an analysis is of no value in determining their etiology or pathogenesis. This striking and immediate expression of affective impulses can be explained only by an arrest of the inhibitory mechanisms of the nervous system.—*Math. H. Piéron* (Sorbonne).

4811. Baudouin, C. Mobilisation de l'énergie. *Eléments de psychagogie théorique et pratique.* (Mobilization of energy. Elements of theoretical and practical psychagogy. Paris: Pelman Institute, 1931. Pp. 328. 25 fr.—The term psychagogy as used by the author means the science of methods of action or the science of the conduct of the mind. This science holds that, in the psychological domain as well as in the physical, there is no loss of energy. Psychological energy can exist in a potential state and it is possible, by the use of appropriate means, to actualize and utilize it. In the first part, the author analyzes a concrete case of a man of 32 years in whom the main weaknesses are a feeling of inferiority, an ever-present hate, and a speech defect. In the second part, the author makes an effort to explain the mechanisms, the different displacements of potential at work in this case. The third part is devoted to an explanation of the practical methods which are based on the mechanisms for realizing mobilizations of energy. There is a bibliography of 63 works.—*Math. H. Piéron* (Sorbonne).

4812. Bénon, R. Confusion mentale et onirisme. (Mental confusion and onirism.) *Gaz. méd. de Nantes*, 1931, 44, 7-11.—In mental confusion the patient has no consciousness of his psychopathic state and remembers nothing. In onirism the patient is conscious of his psychopathological condition and can describe it perfectly. Mental confusion (disorders of perceptivity and recognition), acute hallucinatory delirium (delirious hallucinosis), and onirism (hallucination without delirium) are three syndromes of toxic origin founded in their essentials on sensory and perceptive disorders.—*Math. H. Piéron* (Sorbonne).

4813. Bleuler, M. Vererbungsprobleme bei Schizophrenen. (The problem of inheritance in schizophrenia.) *Zsch. f. d. ges. Neur.*, 1930, 127, 321-388.—(*Bibliographia Eugenica*).

4814. Boettiger, —. Umfang und forensische Bedeutung der Hysterie. (The extent and forensic significance of hysteria.) *Allg. Zsch. f. Psychiat.*, 1931, 94, 417-426.—(*Soc. Sci. Abst.* III: 16375).

4815. Brill, A. A. Professor Freud and psychiatry. *Psychoanal. Rev.*, 1931, 18, 241-246.—Address delivered at seventy-fifth birthday dinner of Freud. Traces influx into psychiatry of psychoanalytic doctrines.—D. Shakow (Worcester State Hospital).

4816. Btriner, O. Ueber den Verlauf der progressiven Paralyse ohne und mit Fieberbehandlung. Katamnestiche Untersuchungen an den Patienten der Psychiatrischen Klinik Zürich von 1903-1929. (The course of paresis without and with fever treatment. Katamnestic investigations with patients at the Psychiatric Clinic in Zurich during 1903-1929.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1930, 128, 792-816.—Of patients who had been inoculated only 11% died, while among those not inoculated a remission is very rare. The expansive form of paresis has become rarer; in the district of Zurich the paretics tend toward paranoid hallucinations.—S. Krauss (Frankfurt a.M.).

4817. Buerger-Prinz, H. Moderne Theorien organischer Hirnstörungen. (Modern theories of organic brain lesions.) *Klin. Woch.*, 1930, No. 38, 1753-1757.—The author's discussions have their starting point in a criticism of the older theories of brain pathology. By approaching the organism with theories one's answers were already determined. Problems of localization and causal connections presented themselves before an exhaustive phenomenology and analysis had taken place. One used to split the totality of the nervous organism into functions that were thought to be isolated from each other, one "thought in defects" and worked with connections of symptoms. Abstract rational principles permitted one to see the nervous organism only as static, while the inner dynamics, the interrelation of the functions, was neglected. The experiences with brain injuries during the war had a revolutionary effect upon theories of brain pathology. Under the guidance of Goldstein, points of view in brain pathology (at first in the fields of aphasia and agnosia) were developed that ran parallel to the psychology of the whole and Gestalt. The assumption of the constant reaction following a stimulus disappeared and one learned to observe the structure of condition and success in activity. The behavior of the disturbed organism is to be explained from its biological situation; every disturbance is followed by a change in the whole personality. The newer sense physiology furnished fertile points of view concerning the rôle of time and movement in the methodology of investigation. The research in encephalitis threw new light upon the mind-body problem by demonstrating the original wholeness of the mind-body unity. A new point of view, which Buerger adopts, is the particularization of the processes in the separate strata; each psychophysical and psychic stratum

has its own categories. Buerger defends his own point of view in regard to an "analysis of results." There are congruent symptoms that cannot be completely resolved into partial conditions, but constitute a new whole (e.g., compulsion), which is also accompanied by a specific mode of experience.—S. Krauss (Frankfurt a.M.).

4818. Buerger-Prinz, H., & Kaila, M. Ueber die Struktur des amnestischen Symptomenkomplexes. (The structure of the amnesic complex of symptoms.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1930, 124, 553-595.—The authors' task is "to present the unitary structure of this syndrome, to show how the same fundamental principles recur again and again in different fields under different conditions." The material consists of four cases of different etiology (carbon monoxide poisoning, arteriosclerosis, fracture of the skull, strangulation). The authors have succeeded in presenting a phenomenologically thoroughgoing description of this complex of symptoms well based on experimental facts (especially in the field of perception and the schematic body image). Their essential points of view are the change in the total personal dynamics, the disuse of emotions and drives, changes in the temporal process, loss of differentiation in all functional fields, difficulty in the genesis of structures, disturbance of synthesis in thinking, vagueness of all purposiveness, early fatigue in discovering meanings. "The result is that through the interaction of these factors disturbances can be shown to be secondary, phenomenological, although formerly looked upon as fundamental in this syndrome, such as disturbances of adjustment, of memory, the failure to apply knowledge, the lack of need to correct." The authors reject the primacy of a theory of memory and the symptoms of a disturbance of retention by pointing out the change of the vital level and the loss of differentiation of all functions. Already "the exclusion of these levels (the vital ones) robs the patient of the continuum of the personal." "The disturbances start already on a different plane, which represents a preparation, a condition for memory function, but not this function itself." No matter how meritorious the structural and phenomenological understanding of the complex of symptoms is in this study, it is not quite satisfactory in the end as regards psychopathological theory. The authors criticize van der Horst's *Temporalisationstheorie*, appearing to consider the disturbance of time as a coordinated factor.—S. Krauss (Frankfurt a.M.).

4819. Cambriels, —. Psychonévrose obsédante de dépersonnalisation avec "moyens de défense" antidépersonnalisateurs. (An obsessive psychoneurosis of depersonalization with antidepersonalizing "means of defense.") *Encéph.*, 1931, 26, 330.—The author describes a patient manifesting clear symptoms of depersonalization which seemed to be a case of typical affection showing a schizothymic or schizoid temperament.—Math. H. Piéron (Sorbonne).

4820. Courtois, A., & Mareschal, P. Syndrome hallucinatoire et syndrome pallidal. (Hallucinatory syndrome and pallidal syndrome.) *Ann. méd.-psychol.*, 1931, 89, 145-148.—This is a case history

of a 41-year-old man who had suffered with malaria and jaundice followed by facial paralysis. From that time on, he showed neurological symptoms pointing to disturbances in the globus pallidus. Simultaneously there developed an auditory hallucinatory syndrome so severe that he sought the protection of a hospital.—M. B. Mitchell (George School, Pa.).

4821. De Plauzoles, S. L'alcoolisme au point de vue social, ses causes, ses conséquences. (Alcoholism from the social standpoint, its causes, its consequences.) *Traité d'hygiène*, 1929, 23, 37-78.—(*Soc. Sci. Abst.* III: 16377).

4822. Dupouy, R., & Courtois, A. Imbécillité par hérédo-syphilis, évolution démentielle. Syndrome humoral paralytique. (Imbecility through hereditary syphilis, evolution of dementia. Humoral paralytic syndrome.) *Ann. méd.-psychol.*, 1931, 89, 141-144.—A case history of a 20-year-old patient, whose father was syphilitic, is given. He developed quite normally until he had convulsions at five years. These were followed by paralysis and dementia until he had a mental age of three years, showed signs of general paralysis and became quite helpless.—M. B. Mitchell (George School, Pa.).

4823. Dupouy, R., & Pichard, H. L'anxiété dans la démence précoce. (Anxiety in dementia praecox.) *Ann. méd.-psychol.*, 1931, 89, 117-125.—Anxiety rather than emotional indifference appears especially in the early stages of dementia praecox. It is most evident in the slowly developing cases, but can usually be found in the outbursts of the acute cases. These latter cases suggest a toxic-infectious encephalitis, while the slowly developing cases suggest a degeneration. Only when the dementia has become total does the patient become emotionally indifferent and lose his anxiety.—M. B. Mitchell (George School, Pa.).

4824. Dupouy, R., & Pichard, H. Syndrome hallucinatoire post-encéphalitique. (Post-encephalitic hallucinatory syndrome.) *Ann. méd.-psychol.*, 1931, 89, 476-478.—This is a case history of a woman who had acute mental symptoms, mainly hallucinatory in nature, following encephalitis. The interesting feature was the recurrence of the symptoms; the first recurrence was after an interval of about six years; later it was at shorter intervals.—M. B. Mitchell (George School, Pa.).

4825. Enke, W. Behandlung und Prognose von Psychosen mit Amenorrhoe. (Treatment and prognosis of psychoses with amenorrhea.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1930, 127, 490-497.—It is a debatable question whether in psychoses with amenorrhea the latter is merely an accompanying symptom or the precipitating cause added to a tendency already present. Here one must distinguish between amenorrhea and menopause. Cases are presented in which immediately after administration of the hormone preparation "Unden" not only the amenorrhea but the psychosis itself disappeared. A causal connection between hormone therapy and cure exists, of course, only if the cure takes place immediately.—S. Krauss (Frankfurt a.M.).

4826. Heerwagen, W. Die Trinkerfürsorge in Tilsit-Stadt und Land mit besonderer Berücksichtigung der Jahre 1928-29. (The treatment of inebriates in the urban and rural districts of Tilsit in 1928-29.) *Allg. Zsch. f. Psychiat.*, 1931, 95, 172-192.—(*Soc. Sci. Abst.* III: 16381).

4827. Hesnard, A., & LaForgue, R. Les processus d'auto-punition en psychologie des névroses et des psychoses, en psychologie criminelle et en pathologie générale. (The processes of self-punishment in the psychology of neuroses and psychoses, in criminal psychology and general pathology.) Paris: Denoël & Steele, 1931. Pp. 83. 7 fr.—After an introduction on the problem of self-punishment in general and its relation to the problem of masochism, the authors discuss self-punishment in neuroses. They present a typical case of neuropathic self-punishment. In the second part, they deal with self-punishment in psychoses; in the third part, with the genesis of morbid social reactions; and they conclude with a discussion of self-punishment in general pathology. No bibliography.—*Math. H. Piéron* (Sorbonne).

4828. Hoffmann, H. Reactive Psychosen und Neurosen. *Fortsch. Neur., Psychiat., u. Grenzgeb.*, 1931, 3, 309-318.—A running discussion growing out of papers read at the 1930 General Medical Congress for Psychotherapy, and centering around the obsessional and compensation (*Renten*) neuroses and "reactive" or "functional" epilepsy. In a consideration of the relative importance of endogenous and exogenous factors in the obsessional neuroses, the author emphasizes that not all these neuroses are to be considered in the same light; in some, endogenous factors are of greater importance, in others exogenous; and exclusive views at either extreme are false. Of the fundamental disturbances which build up a compulsive symptom, some may be purely neurological, e.g., the disturbances in thought processes which result in iteration. The second component in the formation of a compulsion neurosis is the underlying emotional tone of the personality, very often an anxiety-depressive background. The third component is a disturbance of development in the sexual sphere. The ways in which these factors are combined in the individual case can be determined only after thorough analysis. Similar clinical pictures must often be interpreted differently from the etiological and prognostic standpoints. The problem of the somato-psychic structure of the personality in the determination of the form and prognosis of psychic diseases and abnormalities will occupy to a high degree the psychiatry of the next decade. In accident and war neuroses, analysis often reveals psychic conflicts, for which the physical injury is only the scapegoat. The post-war narrowing and uncertainty of the conditions of life has brought an obsessive demand for material security and has led to a disconcerting increase of such neuroses. The author brings out the respective ethical responsibilities of physician and patient in these disorders. He also discusses the fact that not only the endogenous psychoses but also the neuroses are built up in layers, the deepest of which rest on the vegetative

nervous system. The author considers briefly the question of reactive epilepsy and its relation to the neuroses. His conclusion is that although psychic experiences and even definite psychic contents may play an important rôle in setting off an attack, yet it is "grotesque" to believe that epilepsy is a psychogenic neurosis. The real cause in most cases is somatic.—*M. E. Morse* (Catonsville, Md.).

4829. Hoffmann, H. Klinische Probleme in erbblologischer Beleuchtung. (Clinical problems considered from the point of view of biological heredity.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1930, 127, 579-595.—The theory of personality types has been enriched through the biology of heredity since the inheritance of the integral elements of personality and their inner structure have been investigated. It is especially important that through inheritance changes in structure may occur, since essential elements may occur in another structural connection; this is true, e.g., in the inheritance of psychopathic conditions. The investigation of the fields of inheritance is of importance for the psychoses; the cyclothymic and schizothymic characteristics are followed up within the family. The "vicinity rule" states that neighboring phenomena are related biologically, e.g., paranoid psychoses with the phenomena of schizophrenia. Since fields of heredity overlap, there appear interesting mixtures of psychoses and atypical psychoses which heretofore have been entirely unintelligible theoretically and which are being cleared up only now through the biology of heredity. One may even say that the disease changes its appearance according to the foundation of personality, that its symptoms and course depend upon the foundation of personality. These points of view have been reached by Mauz, a pupil of Kretschmer, in his numerous investigations on the prognosis of endogenous psychoses. A further result is that the endogenous psychoses do not represent clearly separate units of disease. Thus we may expect from the biology of heredity a significant deepening of clinical theory.—*S. Krauss* (Frankfurt a.M.).

4830. Hofstätter, R. Die psychiatrischen und neurologischen Indikationen zur Unterbrechung der Schwangerschaft. (The psychiatric and neurological indications for the interruption of pregnancy.) *Zentbl. f. Psychotherap.*, 1931, 4, 477-480.—The discussion of this subject at a combined meeting of the Obstetrical and Gynecological, and Psychiatric and Neurological Societies of Vienna brought out many opinions. The usual medical standpoint was supported that a disease is an indication only when it constitutes a danger to the life or health of the mother which can be met in no other way. The wide differences of opinion among physicians may be due to the fact that, consciously or unconsciously, they are influenced in varying degrees by social and eugenic considerations. The woman's right to self-direction must also be considered. As to the neurological indications, there was agreement that pregnancy should be interrupted in severe hyperthyroidism, in chorea, acute encephalitis, muscular dystrophy, myasthenia, and brain tumor. From the



psychiatric standpoint, manic-depressive insanity and acute toxic and infectious confusional states are not usually indications. The situation in schizophrenia is very difficult. The remittent form often stands in relation to pregnancy, and in such cases the termination of pregnancy, with subsequent sterilization, is generally recommended. In psychogenic depressions with danger of suicide, the treatment is not the interruption of pregnancy, but psychotherapy and appropriate general and nursing care. Epilepsy is, in the general opinion, an indication for intervention. The discussion brought out the facts that there has been very little exact study on neurological and mental diseases complicated by pregnancy, and that the later histories of cases in which pregnancy was allowed to continue have not been followed. More research is urgently needed.—*M. E. Morse* (Catonsville, Md.).

4831. **Hutchins, F. F.** Teaching mental hygiene in medical, nursing, educational and other professional schools. *Indiana Bull. Charities & Corrections*, 1931, Nos. 191-192, 227-231.—(*Soc. Sci. Abst. III*: 16522).

4832. **Jacobi, W.** Arbeiten zur Ideengeschichte der Psychiatrie. II. Das mechanistische und das genetische Prinzip in der Geschichte psychiatrisch-neurologischen Denkens. (Studies in the history of concepts in psychiatry. II. The mechanistic and the genetic principle in the history of psychiatric and neurological thinking.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1930, 128, 129-150.—Descartes' philosophy and the scientifically progressing age create at first a mechanistic psychology during the first flowering of psychiatry (Griesinger, Wernicke, Meynert, Flechsig). Kraepelin, under the influence of Wundt and Fechner, introduces the psychological experiment into psychiatry and replaces speculative by observing psychology. Recent psychiatry is oriented according to a genetic psychology issuing from Ehrenfels, Dilthey and Freud. Another type is the neurobiological psychiatry of which the work of Monakow is representative, with an acceptance of Bergson's ideas.—*S. Krauss* (Frankfurt a.M.).

4833. **Lange, J.** Fragestellungen der vergleichenden Psychiatrie. Entwicklungspsychiatrie. (Problems of comparative psychiatry. Genetic psychiatry.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1930, 127, 667-683.—The first attack in this field was undertaken with a sure eye by Kraepelin, who investigated problems of race psychiatry during his trips into far countries. With certain reservations one can also use animals for comparison; thus one can compare the death-feigning reflex with hysterical fainting. The basis for comparison is largely in the physiological field. Many interesting things are seen in the field of motor phenomena. The deterioration of highly differentiated forms of habitual movements uncovers mechanisms which belong to former stages of development as normal elements. In general it is true for psychopathological syndromes that during regression pre-formed primitive modes of reaction appear. In diffuse cortical diseases primitive forms of total behavior occur. Hydrocephalus of horses presents comparable phenom-

ena; encephalitis of animals is also studied intensively nowadays (e.g., Borna's disease in horses). It is to be noted that encephalitis in children has a different course from encephalitis in adults. It is possible to find parallels for epilepsy and manic-depressive psychosis among animals; schizophrenia and psychopathic states, however, seem to be a sacrifice with which humanity pays for its high level of culture.—*S. Krauss* (Frankfurt a.M.).

4834. **Langeluedde, A.** Diagnostische Studien am W. Sternschen Aussageversuch. I. Manisch-depressives Irresein und Schizophrenie. (Diagnostic studies with W. Stern's Aussage experiment. I. Manic-depressive psychosis and schizophrenia.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1930, 128, 257-264.—In the case of children's Aussagen W. Stern distinguished in the forms of their reports between stages of substance, action, relation, and quality. These stages are also found in mentally diseased persons and are evaluated in the sense of a series of levels. The order of the reports also (saltatory, spatial, according to importance) may be divided into such levels. In manic-depressive patients we find the highest levels of reports and good order, while in schizophrenics we find lower levels (the relational form especially frequently) and often saltatory order. Manic-depressives show a great reliability in their reports, schizophrenics a great suggestibility. The pleasure in colors in cyclothymics, as found in the studies inspired by Kretschmer and Kroh, is confirmed. The form and order of the report, the number of correct facts, reliability of the report and examination, the number of the correct and wrong reports of colors furnish diagnostic hints for the groups of diseases investigated here.—*S. Krauss* (Frankfurt a.M.).

4835. **Langner, H. P.** Teaching mental hygiene in a training course for social work. *Indiana Bull. Charities & Corrections*, 1931, Nos. 191-192, 236-239.—(*Soc. Sci. Abst. III*: 16383).

4836. **Leroy, —, Médakovitch, —, & Monier, —.** Recherches sur l'étiologie des délires secondaires chez les paralytiques généraux après impaludation. (Research on the etiology of secondary delusions following impaludation in general paralytics.) *Ann. méd.-psychol.*, 1931, 89, 170-176.—The secondary delusion in the general parietic patients studied was due to malaria in 60% of the cases. These patients had been given sufficient quinine to bring the temperature down to normal, but in most of the cases, a hematoozon was still found in the blood. After the temperature decrease the parasite had become resistant to quinine and arsenic. The only clinical sign present in these cases was cachexia, so a blood examination was necessary to determine the cause of the emaciation and delirium.—*M. B. Mitchell* (George School, Pa.).

4837. **Leslie, E. E.** Social status of the mentally sick. *U. S. Vet. Bur. Med. Bull.*, 1931, 7, 358-361.—(*Soc. Sci. Abst. III*: 16376).

4838. **Lévy-Valensi, J., & Ey, H.** Délire spirite. Ecriture automatique. (Spiritistic delusion. Automatic writing.) *Ann. méd.-psychol.*, 1931, 89, 126-

140.—This is a case history of a woman aged 53 years, who communicated with the spirits not only by means of automatic writing, but also by means of hallucinations in all the senses.—*M. B. Mitchell* (George School, Pa.).

4839. **Lotmar, F.** *Das extrapyramidal-motorische System und seine Erkrankungen.* (The extrapyramidal-motor system and its diseases.) *Fortsch. Neur., Psychiat., u. Grenzgeb.*, 1931, 3, 245-308.—A comprehensive and critical review of the literature in various languages from 1926 to 1929 inclusive. The author takes up the subject under the following headings: anatomical considerations; the various forms of chorea; myoclonia; athetosis; torsion spasm; spastic torticollis and organic ties; the Wilson-pseudosclerosis group; paralysis agitans and allied symptoms; and a general consideration of the pathological physiology of the extrapyramidal system. 16 pages of references.—*M. E. Morse* (Catonsville, Md.).

4840. **Loudet, O.** *Los indices médico-psicológicos de la peligrosidad y la libertad condicional.* (Medical-psychological indices of dangerousness and conditional release.) *Rev. de crim. psychiat. y med. leg.*, 1931, 18, 3-9.—(*Soc. Sci. Abst.* III: 16342).

4841. **Low, A. A.** *A case of agrammatism in the English language.* *Arch. Neur. & Psychiat.*, 1931, 25, 556-597.—A case is described in which an "agrammatic" disturbance was traced to a difficulty of apperceiving "meaningless" parts of speech. All the defects of the various functions were reduced to a relative inefficiency to analyze parts out of a whole and to a relative preference for synthesizing parts into a whole. The hypothesis that the aphasia represent generally a qualitative defect of intelligence was challenged. The method of testing, which was oriented on both linguistic and psychologic principles, measured the span of each function.—*V. M. Jones* (Boston Psychopathic Hospital).

4842. **Moehlig, R. C.** *Migraine. A study based on one hundred cases.* *Endocrinology*, 1931, 15, 11-16.—(*Bibliographia Eugenica*).

4843. **Myers, G.** *California state mental hygiene survey.* *California & Western Med.*, 1930, 33, 872-876.—(*Soc. Sci. Abst.* III: 16411).

4844. **Neumann, J.** *Experimentell-psychologische Untersuchungen zur Struktur der Neurose.* (Experimental studies on the psychological structure of the neuroses.) *Zentbl. f. Psychotherap.*, 1931, 4, 425-450.—The author believes that the neuroses can be studied experimentally, not only by psychotherapy, which fulfills the conditions for an experimental method, but also under controlled conditions in a single session. His method is to have the patient read passages chosen for the purpose of calling out various psychic reactions. The behavior, word responses, reaction time, and patient's report on his subjective experiences are recorded and analyzed. The psychic pictures given by this method were found to agree with psycho-analytic data. The experimental results show the present state, but not its origin, which must be discovered through psychoanalysis. The author discusses the results of his

method in relation to the structure of the personality and to the super-personal unities. The personality is made up of constant and fluctuating components. In the normal person, the psychic life may be changed by "free" experiences, while the neurotic is held fast by the constant structure. The same considerations hold true for historical periods and cultures. There are two forms of structure, the personal and that of objective values. The neurotic is controlled largely by the former; the normal, by the latter. The goals are self-maintenance as contrasted with self-development. The psychic life is absolutely controlled by one constant, personal worth, which appears in its active form in the will to power, and in an apparently passive form, the aim of which is protection. The neurotic conflict is a conflict of values. The neurotic is determined to maintain the dominance of his personal worth against the objective scale of values, and his cure consists in his recognition of the dominance of external values. The subjects of the author's experiments showed selective tendencies to "open" or "closed" attitudes toward the material, determined by their systems of values. The actual personal unity must also be interpreted as a genetic whole (developmental psychology). It is only a part of larger unities, embedded in a natural setting (psychoanalysis), having social connections (individual psychology), a system of values ("scientific psychology"), and cosmic relationships (religious psychology). From the consideration of such unities is built up a system of anthropology.—*M. E. Morse* (Catonsville, Md.).

4845. **Pascal, C., & Deschamps, A.** *Psychoses de sensibilisation.* (Psychoses of sensitivity.) *Ann. méd.-psychol.*, 1931, 89, 449-460.—The first section of this article is a review of the various theories of the pathogenesis of paranoid conditions. They range from the environmental conflict theory of Kretschmer to the theory of purely endogenous origin. The other two sections are: (1) clinical descriptions of conflicts, giving their composition and mode of action, and (2) a description and criticism of the sensitive character of Kretschmer.—*M. B. Mitchell* (George School, Pa.).

4846. **Pascal, C., & Vié, J.** *Démence précoce et schizophrénie de Kretschmer-Morel et la notion de terrain dans la démence précoce.* (Dementia praecox and Kretschmer-Morel schizophrenia and the idea of terrain in dementia praecox.) *Encéph.*, 1931, 26, 283-314.—The authors desire to show the importance of Morel's work in Kretschmer's conception of schizothymia. They emphasize the idea of terrain in dementia praecox which is held by Morel. They further describe their own researches on 119 patients, the purpose of which was to verify Kretschmer's postulates in regard to heredity and schizothymic morphograms.—*Math. H. Piéron* (Sorbonne).

4847. **Patten, C. A.** *Cerebral birth conditions, with special reference to cerebral diplegia.* *Arch. Neur. & Psychiat.*, 1931, 25, 453-468.—Analysis was made of 46 cases. The frequent occurrence of bilateral motor involvement together with defect in intelligence indicates something more than the effects of trauma

or vascular accidents in the neurologic conditions in the newborn infant. Further histologic study is needed of the entire nervous system, particularly from the standpoint of myelinogenesis.—*V. M. Jones* (Boston Psychopathic Hospital).

4848. **Petrén, A.** Bericht über das Irrenwesen des Auslandes. Das neue schwedische Irrengesetz. (The treatment of the mentally diseased in foreign countries. The new Swedish law on mental disease.) *Allg. Zsch. f. Psychiat.*, 1931, **94**, 452-458.—(*Soc. Sci. Abst.* III: 16397).

4849. **Pintner, R.** Feeble-mindedness. In *A Handbook of Child Psychology*. Worcester, Mass.: Clark Univ. Press, 1931, 585-626.—This study contains a historical review of the conception and the care of feeble-mindedness. It is evident that the term does not discriminate satisfactorily between mental defect and low general intelligence. In the first group are physical types including the cretin, Mongol, microcephalic, and hydrocephalic. The characteristics of each of these are explained and illustrated with photographs. The Binet-Simon scale is the most used instrument of diagnosis in the group of low intelligence. Those testing below M.A. 2 are classified as idiots; from M.A. 3 to 6, imbeciles; from 6 to 9, morons. The percentage of feeble-minded varies from one to three, according to conception of what constitutes mental deficiency. The mental development of these children is slower, but qualitatively similar to that of normal children. They are retarded also in physical, motor, and sensory development, but to a less degree. There is a tendency to a higher disease and death rate. The greatest amount of feeble-mindedness is inherited; a small percentage is due to disease and accident. There is no cure; the treatment lies in training the child to use all of the ability he has, particularly in practical ways. Segregation and sterilization are the preventive courses; the latter is not extensively practiced. A bibliography of 91 titles is included.—*M. P. Montgomery* (Faribault, Minn.).

4850. **Quercy, P.** Etudes sur l'hallucination. I. Les philosophes, les mystiques. II. La clinique. (Studies on hallucination. I. Philosophers, mystics. II. Clinical observations.) (2 vols.) Paris: Alcan, 1930. Pp. 381; 558. 40 fr.; 60 fr.—The first volume is concerned with the history of philosophy rather than with psychology as the term is generally understood. The second volume, filled with facts and observations, shows to what extent the concept of hallucination is still subject to controversy.—*Math. H. Piéron* (Sorbonne).

4851. **Révész, B.** Bericht über das Irrenwesen des Auslandes. Der derzeitige Stand des Irrenwesens in Rumänien. (Treatment of the mentally diseased in various countries. The present status in Rumania.) *Allg. Zsch. f. Psychiat.*, 1931, **94**, 449-452.—(*Soc. Sci. Abst.* III: 16412).

4852. **Richet, C., Jr., & Dublneau, J.** Considérations sur la pathogénie des troubles du métabolisme azote dans les maladies mentales. (Considerations of the pathology of disorders of nitrogen metabolism in mental diseases.) *Ann. méd.-psychol.*, 1931, **89**, 183-189.—A report was given of some experimental

work, using rabbits as subjects. Punctures in the bulbar region were followed by disturbances of nitrogen metabolism, as shown by urine examinations.—*M. B. Mitchell* (George School, Pa.).

4853. **Rifat, A.** Un cas d'atrophie optique sans stase papillaire dans une tumeur du lobe frontal compliquée d'hydrocephalie ventriculaire. (A case of optic atrophy without papillary stasis in a case of tumor of the frontal lobe complicated with ventricular hydrocephalia.) *Ann. d'ocul.*, 1931, **168**, 206-212.—The author describes a case of complete amaurosis in a patient 35 years of age. The pupils were strongly dilated, there was no light perception, and the ophthalmoscope showed an optic atrophy of a primary type. Olfactory sensitivity had disappeared, but gustatory sensitivity remained intact. The patient showed memory disturbances with a slowing down in association of ideas. In addition there was an apathetic condition akin to somnolence.—*Math. H. Piéron* (Sorbonne).

4854. **Ross, L. F.** Organization of the mental hospital and its rôle in community life. *Indiana Bull. Charities & Corrections*, 1931, Nos. 191-192, 247-252.—(*Soc. Sci. Abst.* III: 16404).

4855. **Schacht, E.** Die Anwendung von Künkels Charakterkunde in Fällen von Trunksucht. (Application of the science of character as taught by Künkels in the treatment of alcoholism.) *Rev. int. contre l'alcoolisme*, 1931, **39**, 23-35.—(*Soc. Sci. Abst.* III: 16413).

4856. **Schenk, A.** 450 Jahre Irrenfürsorge der Stadt Breslau. Zur Tagung des Deutschen Vereins für Psychiatrie am 9. und 10. April 1931 in Breslau. (450 years of care of the mentally diseased in Breslau. The meeting of the German Society for Psychiatry, April 9-10, 1931, in Breslau.) *Allg. Zsch. f. Psychiat.*, 1931, **94**, 387-406.—(*Soc. Sci. Abst.* III: 16414).

4857. **Schilder, P.** Vestibulo-Optik und Körperschema in der Alkoholhalluzinose. (Vestibular-optical phenomena and the schematic body image during alcohol hallucinosis.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1930, **128**, 784-791.—The author shows the connections between vestibular-optical phenomena and the schematic body image in three cases of alcoholic hallucinosis. Primitive tendencies of movement and multiplication, originally contained in every idea, occur by themselves in pathology. Similar phenomena occur also in eidetics and in visual agnosia. These facts demonstrate the significance of the function of the vestibule for the visual world. The schematic body image during hallucinosis shows itself disturbed even in the sense of correct activity in regard to one's own body.—*S. Krauss* (Frankfurt a.M.).

4858. **Schmideberg, M.** A contribution to the psychology of persecutory ideas and delusions. *Int. J. Psychoanal.*, 1931, **12**, 331-367.—Analysis of two patients who suffered from ideas and delusions of persecution provides a basis for generalizations. The analysis of a 16-year-old boy over a period of a year and two years' analysis of a young man of 24 are reported in some detail. Some of the significant



points appearing from the analysis of both patients are as follows: It appears that the super-ego directs itself against libidinal satisfaction, against the realization of incest wishes and homosexual wishes. Energy withdrawn from the erotic impulses (due to the prohibitive attitude in the super-ego against their gratification) may be used to supplement sadistic tendencies. Instead of paranoia resulting directly from repression of homosexual libidinal wishes, it is rather derived from the aggressive, sadistic trends. The sadistic wishes of the individual are projected onto others; paranoid fears and ideas of persecution are the projection of feelings of guilt and of the sadistic and aggressive wishes that really exist within the patient. Withdrawal from objects, in these patients, also serves the sadistic aim; their lack of interest in people signifies that people are dead for them. Withdrawal from outer objects and reality signifies both that the environment is dead for the patient and that he himself is dead, since he no longer feels the environment; thus he protects himself from anxiety. Besides these theoretical contributions, the author makes suggestions concerning analytic techniques which should be useful with patients of this type.—*P. Blanchard* (Philadelphia Child Guidance Clinic).

4859. Sérégé, H. Apparition simultanée chez deux époux d'une glycosurie d'origine émotionnelle. (The simultaneous appearance in a married couple of glycosuria of an emotional origin.) *Gaz. hebdomadaire de médecine et de chirurgie*, 1931, 52, 323-325.—The appearance of glycosuria was nearly simultaneous in these two people, who manifested no nervous or physiological defects. There was only one possible reason, a great emotional shock caused by the sudden loss of an only son at the age of 30. These observations gave evidence of the action of the nervous system on the glyco-regulatory system in that the former, under the influence of a strong emotion, upset equilibrium by an inhibition of the pancreatic secretion and hindered the production of insulin. Thereby glycosuria was brought about.—*Math. H. Pélron* (Sorbonne).

4860. Seymour, W. Y. Problems of the entrance ward in a hospital for psychotic patients. *U. S. Vet. Bur. Med. Bull.*, 1931, 7, 492-497.—(*Soc. Sci. Abst.* III: 16405).

4861. Sigg-Boeddinghaus, M. Entwicklung und Fortschritte der modernen Psychotherapie. (Development and progress of modern psychotherapy.) *Psychol. Rundschau*, 1931, 3, 103-107.—A brief report of the annual meeting of the Medical Congress for Psychotherapy, which convened at Dresden. The author comments on the clearer understanding of the relationship between the psychical and the physical that has come to the medical profession. A change of attitude has taken place in recent years which sees individual phenomena in better relationship to the whole of the personality and makes a saner diagnosis of physical and mental ills a possibility. Jung gave an outstanding contribution to this field at the meetings of the Congress.—*A. B. Herrig* (Michigan Central State Teachers College).

4862. Sondén, T. Reseberättelse över en psykia-

trisk studieresa i Italien. (Account of psychiatric impressions gathered on a tour through Italy.) *Svensk. läkart.*, 1931, 28, 1111-1126.—The writer gives a survey of his impressions from the main institutions for mental diseases in Italy, such as those in Catania, Palermo, Naples, Rome, Florence, and Milan, in regard to the general management of the problem of the mentally diseased, methods of treatment, psychotherapy, etc. The responsibility for hospitalization rests primarily with the various provinces, not with the state, except for the criminally insane. Fifteen days of observation in a psychiatric clinic is obligatory before commitment to an asylum. Among mental diseases schizophrenia is the most prevalent in Italy. The new Fascist criminal law of October, 1930, is also discussed in its relation to mental disease.—*M. L. Reymert* (Mooseheart Laboratory for Child Research).

4863. Stevens, N. C. Endocrine and fatigue headaches. *New England J. Med.*, 1929, 201, 801-805.—(*Bibliographia Eugenica*).

4864. Strachey, J. The function of the precipitating factor in the aetiology of the neuroses: a historical note. *Int. J. Psychoanal.*, 1931, 12, 326-330.—The precipitating causes are distinguished from the predisposing causes of a neurosis, the former being factors which have caused the illness to break out at that time rather than any other. Breuer and Freud first emphasized the precipitating factor—a psychical trauma—as decisive; later this precipitating factor was seen to be only a repetition of an earlier infantile trauma. Still later it appeared that a neurosis could be precipitated only when there was too great frustration of libido; this frustration could be due to either internal or external factors. More recent developments suggest that libido frustration is a special case of the danger situation, to which the ego will react with anxiety or with a neurosis. The precipitating cause (danger situation) may be a banal event or a violent trauma, depending upon which is necessary to bring about a revival of old situations of anxiety. It is probable that a part, at least, of the precipitating cause must be external, although some recent views would emphasize the major importance of the internal aspect of the precipitating factor.—*P. Blanchard* (Philadelphia Child Guidance Clinic).

4865. Sullivan, E. A. Mental hygiene as applied to college freshmen. *New England J. Med.*, 1931, 204, 62-66.—(*Soc. Sci. Abst.* III: 16415).

4866. Thomas, A. Le nystagmus rotatoire et la syringobulbie. (Rotatory nystagmus and syringobulbia.) *Méd.*, 1931, 12, 114-118.—The presence of rotatory nystagmus can in itself determine a diagnosis of the seat or the nature of lesions. The author gives a case of a young nun, 19 years of age, who was sent to him because of a pain located in the left cervical region, radiating as far as the arm. It was the only trouble complained of by the patient. An examination for sensitivity showed a very marked anesthesia to pricking and to thermic stimuli. Touch seemed to be unaffected. An examination of the motility of the eyeballs showed rotatory nystagmiform attacks, clockwise and sometimes counter-clockwise

when the gaze was directed towards the right. It was this fact which permitted a diagnosis of syringobulbia.—*Math. H. Piéron* (Sorbonne).

4867. **Tinel, J.** *Provocation de crises mélancoliques par des émotions joyeuses.* (Provocation of melancholic crises by joyous emotions.) *Ann. méd.-psychol.*, 1931, **89**, 155-161.—Four cases are reported in which an attack of depression followed a joyous emotional upset.—*M. B. Mitchell* (George School, Pa.).

4868. **Triantophyllos, D.** *Le trouble essentiel de la schizophrénie et des affections psychiques en général.* (The essential disturbance in schizophrenia and in psychological affections in general.) *Encéph.*, 1931, **26**, 263-282.—The author reviews successively the concepts held by Kraepelin, Minkovski, Weigandt, Chaslin, and Wundt in regard to the following questions: intrapsychic ataxia, intrapsychic disharmony, psychic division (schizophrenia), psychic discordance, psychic dissociation, the loss of internal unity of the psychism with a weakening of the superior functions of the psychological triad (intelligence, will, and feeling), a weakening of Wundt's apperception, disorders of instinct, and a loss of contact with reality. The author's problem is to solve the question of the essential, fundamental disturbance in schizophrenia, which he considers to be an insufficiency in ideation of logical consequences. According to him the sole possible association of psychic neurons would be a reciprocal association in every direction. The unique function of psychic neurons would be intelligence, the other two members of the triad, affectivity and will, being not separate functions but only different forms of intelligence. The most nearly perfect expression of the latter is ideation of logical consequences, the disturbance of which constitutes the essential trouble in schizophrenia.—*Math. H. Piéron* (Sorbonne).

4869. **Trubert, E.** *La mythomanie, pathologie de la vanité.* (Mythomania, the pathology of vanity.) *Sci. méd. pratique*, 1930, **5**, 603.—Mythomania is an impulsive, native tendency to misrepresent facts and to create stories and myths by means of words, attitudes, or actions. It is encountered in both intelligent and feeble-minded persons and in subjects who are hyper-imaginative and those who have very little imagination. Intelligence and imagination are only means to an end, used in these cases of affective disturbances (cases of abnormal sociability) in order to gain attention at any price.—*Math. H. Piéron* (Sorbonne).

4870. **Urechia, C. I., & Kernbach, M.** *Les morphinomanes d'opportunité.* (Morphinomania of expediency.) *Ann. méd.-psychol.*, 1931, **89**, 176-179.—Three cases are given in which men simulated morphinomania in order to appear irresponsible and thus escape conviction for criminal offenses.—*M. B. Mitchell* (George School, Pa.).

4871. **Urechia, C. I.** *Sur quelques psychoses grippales.* (Some grippal psychoses.) *Ann. méd.-psychol.*, 1931, **89**, 179-183.—Psychoses developing during or immediately following the acute stages of

influenza are described in eight cases. The forms of the psychoses are variable and their duration is from a few weeks to a few months.—*M. B. Mitchell* (George School, Pa.).

4872. **Van der Hoop, J. H.** *Psychology and hysteria.* *Arch. Neur. & Psychiat.*, 1930, **24**, 324-334.—Reports of clinical cases showing that the group of disorders termed hysterical may be subdivided psychologically into smaller groups and that these several groups are fairly distinct from one another in their manifestations.—*V. M. Jones* (Boston Psychopathic Hospital).

4873. **Wertham, F.** *Progress in psychiatry. IV. Experimental type psychology.* *Arch. Neur. & Psychiat.*, 1930, **24**, 605-611.—A discussion of new researches in "experimental type psychology." It has been possible to isolate a number of psychological phenomena between cyclothymic and schizothymic types and to demonstrate by psychological experiments fundamental differences between the two series. Experiments noted are the following: (1) use of Rorschach test by Munz; (2) tachistoscopic exposures of colored figures by Scholl; (3) tachistoscopic exposures of a long word by Enke; (4) interrupted light signals by Van der Horst and Kibler; (5) interpretation tests and association experiments by Pfahler; (6) tests of differences in psychomotor responses by Liepman and Enke.—*V. M. Jones* (Boston Psychopathic Hospital).

4874. **Wertham, F.** *Progress in psychiatry. V. Eidetic phenomena and psychopathology.* *Arch. Neur. & Psychiat.*, 1930, **24**, 809-921.—Although there has been excellent experimental work in the significance of eidetic phenomena from the psychopathologic point of view, there are as yet few concrete instances in which these investigations contribute definitely to psychiatric problems. From these beginnings, however, it seems that the study of eidetic phenomena has great significance for psychopathology. One of the chief contributions is the demonstration that at least in the psycho-sensory sphere, a veritable "metamorphosis" takes place in human development between childhood and maturity.—*V. M. Jones* (Boston Psychopathic Hospital).

4875. **Zaborowski, —.** *Vices provoqués par des carences alimentaires.* (Vices brought on by alimentary deficiencies.) *Bull. Soc. sci. d'hyg. alimentaire*, 1931, **19**, 24-26.—The author succeeded in reproducing at will the condition wherein many females devour their offspring or the males. It seemed, according to the author, that the animals concerned were not trying solely to satisfy an excessive appetite or to overcome a feeling of general hunger, but that there was present quite another feeling caused by a certain deficiency which could only be overcome by an enormous absorption of alimentary material. By the suppression of vitamins B and D the author created this phenomenon at will and by the use of the same two vitamins he caused the cessation of these profound manifestations of abnormality. In man the fact of biting the nails shows an analogous deficiency, and this habit was caused to disappear after a ten-day treatment with vitamins B and D.

The author thinks that cannibalism may arise from phenomena of the same order.—*Math. H. Piéron* (Sorbonne).

[See also abstracts 4683, 4760, 4785, 4797, 4924, 4954, 4984, 5001, 5058, 5066.]

#### SOCIAL FUNCTIONS OF THE INDIVIDUAL

4876. **Aldrich, C. R.** *The primitive mind and modern civilisation.* New York: Harcourt, Brace, and London: Kegan Paul, 1931. Pp. xvii + 236. \$4.00. 12/6.—The author discusses the social psychology and sociology of primitive peoples in the light of the Zürich school of "analytical psychology." The book is not one of first-hand observation, or of experimental study, but it endeavors to apply a psychological method to the interpretation of many outstanding social questions, particularly as relating to primitive group life. There is much criticism of the Lévy-Bruhl school of thought.—*F. C. Bartlett* (Cambridge, England).

4877. **Allendy, —.** *La justice intérieure.* (Inner justice.) Paris: Denoël & Steele, 1931. Pp. 278. 18 fr.—The author states at the outset that justice will be incomprehensible to man as long as one considers only conscious psychology. Judiciary institutions on the one hand and religious beliefs on the other reveal the obscure and profound need of retribution. The philosophies of ethics have all failed to discover a rational basis for the desire for justice, and have finally had to invoke a feeling that is both imperative and irrational. Now, if one takes the trouble to study the instinctive life of man, he is led to admit social instincts of adaptation, whose effect is to inhibit individual aspirations in violent disagreement with the environment; this awakens the sense of justice. The analysis of pathological cases in which the aggressive tendencies of the individual turn back on himself shows with morbid exaggeration the psychic functioning of the social instincts. It is apparent that masochism and the mechanisms of self-punishment play a rôle in the behavior of normal men—a rôle which is extended and concealed from superficial investigation. The author presents this finding, the most recent acquisition from psychoanalytic work, together with clinical observations and the explanation not only of Freudian theories but of his own point of view concerning social instincts. He considers the deductions which are imposed with respect to judiciary penalties. In the last chapter, the author indicates that the forces of synthesis of which social instincts are the expression ought to prevail over individual instincts.—*Math. H. Piéron* (Sorbonne).

4878. **Allport, F. H., Katz, D., & Babcock, M.** *A reaction study for the measurement of student opinions.* Chicago: Stoelting, 1931.—A check-list designed to reveal the opinion of college students on a large number of current social problems and topics, such for example as college life, vocations, athleticism, fraternities, politics, freedom of speech, religion, coeducation, etc.—*L. A. Averill* (Worcester State Normal School).

4879. **Anderson, E.** *Selective migration from*

*three rural Vermont towns and its significance.* 5th Ann. Rep. Eng. Surv. Vt., 1931. Pp. vii + 82.—An analysis of the population turnover and its concomitants in representative towns of three kinds. The variables analyzed include occupancy of habitable houses, total emigration, ancestral town affiliations, reproductivity, age, marital status, education, stability of residence, occupation, cooperative nature of the migration, distance moved, present location, size of present domicile, reasons for leaving, nativity. In general, although the migration is a gradual phenomenon and occurs largely among the old stock and over short distances, it is probable that it is slowly draining the better and younger blood away from the land.—*R. R. Willoughby* (Clark).

4880. **Aptekar, H.** *Primitive psychology and birth control.* *Birth Control Rev.*, 1931, 15, 112-114.—(*Soc. Sci. Abst.* III: 14988).

4881. **Artom, C.** *Teoria dell'armonia.* (The theory of harmony.) Turin: Bocca, 1931. Lire 15.—*A. Angyal* (Turin).

4882. **Aschaffenburg, G.** *Einheitlichkeit der Sicherungsmassnahmen.* (Unity of methods for assuring the safety of society.) *Monatssch. f. Krim.-psychol. u. Strafrechtsref.*, 1931, 22, 257-265.—The author considers methods for picking out the asocial and antisocial individual in time to prevent harm to society. Asocial personalities are to be grouped (1) according to their bodily and mental type, and (2) from the point of view of society. Through this approach the legal control of the criminal situation will be improved because of the elasticity of the scheme. Emphasis must be placed upon unity of method if the safety of society is to be obtained.—*W. Beck* (Leipzig).

4883. **Beane, J. C.** *A survey of three hundred delinquent girls.* *J. Juv. Res.*, 1931, 15, 198-208.—The survey is concerned primarily with 300 delinquents, inmates of the Indiana State School for Girls. Data are offered with respect to such issues as the delinquents' residence, offenses, home relations, freedom from social disease, criminal relatives, marital status, IQ, church affiliations, school attendance, and age at commitment, as well as the reputation, economic status, court history, and place of birth of the parents.—*H. L. Koch* (Chicago).

4884. **Becker, H.** *Forms of population movement: prolegomena to a study of mental mobility.* *Soc. Forces*, 1930, 9, 147-160.—Population movements are too complex to be adequately accounted for by the usual demographical and ecological methods. Intensive culture case study is necessary. The complexity of the problem is indicated by the following conditioning factors of population movement: the monadic or plural nature of the movement, the age level of the individuals in the movement, the sex ratio of the movement, the rapidity of movement, the temporal relation of movement to settlement, the politico-geographical areas involved, and the social change due to new geographical environment.—*D. Katz* (Princeton).

4885. **Bellerby, J. R.** *A contributive society.* London: Education Services, 1931. Pp. xvi + 224.



7/6.—The author discusses the psychological foundations of current economic systems, especially in relation to education, and draws a picture of a society in which the constituent individuals and groups are motivated mainly by a drive to contribute to the economic and other status of the whole. He endeavors to show the part which may be played by education in bringing about this state of affairs, and discusses various recent educational experiments which were more or less directed to stimulating cooperative activity.—*F. C. Bartlett* (Cambridge, England).

4886. **Benedict, R.** *Psychological types in the cultures of the southwest.* *Proc. 23rd Int. Cong. Amer., New York, Sept. 17-22, 1928, 1930, 572-581.*—(*Soc. Sci. Abst.* III: 14944).

4887. **Bernard, L. L.** *Culture and environment. II. The continuity of nature and culture.* *Soc. Forces, 1930, 9, 39-48.*—In their assumption that culture is explicable in terms of itself, radical culture determinists make two errors. They minimize the rôle of the natural environment in the development of culture. Their emphasis upon the passive part of the natural environment is contradicted by the fact that in the early stages of empirical invention nature furnished the model. In its first forms culture is but a continuation and elaboration of the forms of the natural environment. And even in later stages where the cultural environment increases in importance, natural environment frequently takes the lead in the determination of culture. The second error of many culture determinists is their failure to account for the origin of the various forms of culture. Too much attention has been given to culture diffusion and too little attention to invention. A borrowed culture pattern must have some origin. Culture is not generated spontaneously from a cultural or natural environment. Culture arises through stimulus-response adaptation of the flexible human organism to its environment. In this process of accommodation or adjustment will be found the explanation of all forms of culture except material culture.—*D. Katz* (Princeton).

4888. **Betgilel, L.** *Vorstellungsgymnastik.* (Dramatic gymnastics.) *Psychol. Rundschau, 1931, 3, 122-124.*—The author introduces the possibility of bodily movement as expressing ideas and feelings of human experiences, thus enriching life through closer observation and artistic reproduction. He contrasts this field with the more formal gymnastics, which become automatic and to that extent deadening.—*A. B. Herrig* (Michigan Central State Teachers College).

4889. **Birnbaum, K.** *Kriminalpsychologie und psychobiologische Verbrecherkunde.* (Criminal psychology and psycho-biological criminology.) Berlin: Springer, 1931. Pp. 304. M. 16.50.—The author's problem is the development of a scientific criminology which shall include criminal manifestations in both the pathological and the normal sphere, that is, normal as well as abnormal criminality. The book therefore starts in the sphere of pathology, not only because the psychopathic border line conditions play a very great and significant part in criminality, but also because, above all, in pathology the phenomena and relations can be seen with particular distinctness

and clearness, so that one can make a gradual transition from the pathological to the normal criminal. Through a double consideration, the consideration of pathological symptoms and types of diseases from the point of view of criminology and inversely, the consideration of crime forms and criminal personalities from the psychopathological point of view, light is thrown upon the dynamics and structures as well as the causes, foundations and forms of criminal phenomena and personalities. The succeeding special consideration of young criminals and neglected children of pathological origin, as well as of the female pathological criminal with her characteristic interplay of endogenous and exogenous factors, also the characterization of environmental influences in pathologically determined criminality, expand the survey of the relations of criminal acts to the different biological, pathological and sociological fields. On this basis, the scientific problem of criminology is elaborated in a systematic way, whereby, in agreement with Lombroso's anthropological criminal theory, degeneration is characterized as the biological foundation of crime, and the close amalgamation of psychic degeneration with criminality is demonstrated. The book then turns to modern psychobiology, which of course at present can be critically indicated only in its bases, outlines and future directions. The emphasis is laid on the psychobiological structure of the criminal personality—how it is built up on the biological basis of a particular psychophysical constitution and heredity through the interplay of primary, psychical, congenital personal capacities with endogenous, psychic, developmental and configurational tendencies and environmental factors from external (especially social) life. The newer medico-psychological criminal theories and the attempts to establish criminal types are brought in as supplements to the characterization. This psychology and pathopsychology of the criminal then goes into penal psychology and pathopsychology, which describes the criminal in his psychological relationship to punishment and sentence, and in his different forms of mental reaction to the criminal deed, investigation and arrest; and which from the various forms of these mental reactions draws psychological conclusions in regard to the personality of the criminal and practical inferences for modern management of punishment, which individualizes and differentiates according to his nature. Finally, the concluding part, which deals with the legal understanding and estimation of the pathological and normal criminal on the basis of the acquired psychobiological material, gives opportunity for a critical point of view in regard to norms of the criminal law, particularly accountability, and the criminal law expert's opinion in general, in order to prepare for a stronger psychological foundation and understanding in criminal law. In a spatially defined framework, the carrying out of this attempt towards the development of a scientific criminology was, naturally, made possible only by the renunciation of an accumulation of numerous individual experiences. In place of this a systematic analysis of the basic facts and a clarification of the main fundamental relationships had to be set forth which per-

mitted an inclusive and general survey of the enormous and not yet exhaustible field by means of the shortest and most precise formulations.—*K. Birnbaum* (Berlin).

4890. **Bodenhafer, W. B.** *Cooley's theories of competition and conflict.* *Publ. Amer. Sociol. Soc.*, 1931, 25, 18-24.—(*Soc. Sci. Abst.* III: 16247).

4891. **Boldyreff, T. W.** *By word of mouth.* Boston: Badger, 1931. Pp. 144. \$2.00.—A series of "informal essays," "unguided excursions into linguistics, sociology and psychology," for which the author, a teacher of languages, makes no claim of scientific treatment. "While attending the IXth International Congress of Psychology . . . I was greatly disappointed by the fact that only very insignificant material was devoted to the study of language from the psychological viewpoint as compared with the time and effort spent upon such minute factors as eye blinks, knee jerks, and the like reflexes together with the moeurs of white rats and guinea pigs."—*E. A. Esper* (Washington).

4892. **Bouthoul, G.** *L'invention.* (Invention.) Paris: Giard, 1930. Pp. 570. 75 fr.—The individual and society are interwoven and are always in relation with each other. Sociologists are concerned chiefly with delimiting the respective domains of these two entities. For the most part they have insisted on the fact that the individual always finds himself in the presence of a sum of perceptions, concepts and moral judgments which he finds ready-made, already elaborated apart from him. But the intellectual patrimony of societies is not a congealed thing; it is in course of perpetual change: every society is continually in the process of adapting itself to itself, to the modifications which constantly come up in the material and intellectual structure. This change is expressed by the invention of new moral and intellectual values. Thus considered, the question presents itself under an aspect no longer static but dynamic; for although one can say that moral judgments and concepts in general which have already acquired "right of citizenship" are imposed on individual consciences as ready-made data which necessitate adherence to them, this cannot be said of judgments or of concepts not yet expressed or admitted. Setting out from this empirical fact, viz., that every true or presumed social finality is expressed in judgments of value set forth by one or several individuals, the author devotes his work to the exploration of that kind of intermediate zone in which these interchanges take place. He studies that fringe of contacts where social relations become conscious and where also is produced the reversed situation in which individual thought is sometimes the cause or one of the determining causes of modifications in society. After a long introduction which states the problem philosophically and minutely criticizes the methods of approach, the author defines a fundamental distinction, that of the difference between technical invention and invention of values, and gives the characteristics and the criteria of that distinction. Parts are given to the detailed analysis of the factors of invention: (1) the peculiarly psychological elements, and (2) the rôle which logic

plays there. The author then passes to the study of facts which occur more particularly in the invention of values: dynamic elements, emotions and affective attitudes. Finally, the last and longest part is given to the strictly social factors and their relation to individual thought. No bibliography at the end, but bibliographic footnotes throughout the book.—*Math. H. Piéron* (Sorbonne).

4893. **Brown, L. G.** *The problems of juvenile delinquency and dependency.* *J. Juv. Res.*, 1931, 15, 155-168.—"The chief problem connected with juvenile delinquency and dependency is that of prevention. But before prevention can be realized, there must be an evaluation of present methods for handling delinquents and dependents. Persons working in the two fields must be equipped with the very latest scientific data concerning human behavior and the process by which it develops. There must be worked out a suitable technique for the study of the individual delinquent and the social situation in which he was produced. The social definition of delinquency and dependency must be changed and there must be a realization that there are areas of delinquency and dependency in our social life in which social variants are bound to develop."—*H. L. Koch* (Chicago).

4894. **Bührig, W.** *Symbolik der Handschrift.* (Symbolism of handwriting.) *Psychol. Rundschau*, 1931, 3, 116-118.—In his article the author deplors the extensive literature of graphology that has arisen, criticizing it as superficial in nature. He comments on the very excellent contribution that has recently been made in the field by Max Pulver, who reveals himself in his studies as being keen in analysis and far-sighted in interpretation.—*A. B. Herrig* (Michigan Central State Teachers College).

4895. **Carpenter, N.** *Urban expansion and neighborhood change.* *Soc. Forces*, 1930, 9, 80-94.—The generalization that transitional areas in growing cities are the foci of deterioration is subject to certain exceptions. Where cities expand slowly and where attitudes of toleration toward slum and vice districts exist, such districts may have a permanent location in other than transitional areas. The transitional area also may not deteriorate but may continue its activities on a steadily narrowing base until supplanted by the invading type of area utilization.—*D. Katz* (Princeton).

4896. **Carpenter, N., & Haenszel, W. M.** *Migratoriness and criminality in Buffalo.* *Soc. Forces*, 1930, 9, 254-255.—A comparative study of 100 felons with a control group shows a relation between criminality and migratoriness. As a fruitful field for further study it is suggested that the analysis of a large number of case records of migrant criminals be made to determine whether initial criminal behavior follows or precedes migration.—*D. Katz* (Princeton).

4897. **Darlington, H. S.** *Ceremonial behaviorism. Sacrifices for the foundations of houses.* (Third paper.) *Psychoanal. Rev.*, 1931, 18, 306-328.—A presentation and discussion of many examples of ceremonial slaughters and sacrifices for making houses substantial and safeguarding the lives of in-

mates. Bibliography.—*D. Shakow* (Worcester State Hospital).

4898. **Deets, L. E.** The origins of conflict in the Hutterische communities. *Publ. Amer. Sociol. Soc.*, 1931, 25, 125-135.—(*Soc. Sci. Abst.* III: 16282).

4899. **Delmas, A.** Psychopathologie du suicide. (The psychopathology of suicide.) *Méd.*, 1931, 12, 154-160.—Contrary to the belief of Maurice Halbwachs that only social causes are active in bringing about suicide, the author declares that anxiety is the one condition which is necessary and sufficient to cause it. Not all cases of anxiety lead to suicide, but there can be no case of suicide without anxiety.—*Math. H. Piéron* (Sorbonne).

4900. **De Saussure, R.** Prophylaxie du crime et de la délinquance dans la jeunesse. (Prophylaxis of crime and delinquency in youth.) *Hygiène ment.*, 1931, 26, 101-116.—This study is divided into three parts: (1) general measures against the spread of crime; (2) family measures against delinquency and crime; (3) measures to be taken in organizing settlement houses. The study is based entirely upon psychological observations.—*Math. H. Piéron* (Sorbonne).

4901. **Dexter, E. W. A., & Dexter, R. C.** The minister and family troubles. New York: Smith, 1931. Pp. 109. \$1.25.—The book is an attempt to secure experiences of ministers in relationship to family and sex problems. A questionnaire was sent to all the ministers of the Unitarian denomination, a comparatively small group, and also to a selected list of ministers of other denominations known for effective work in this field. The questionnaire asked for cases in which ministers had been both successful and unsuccessful in handling family problems, also concerning methods in sex education, advice given young people, and marriage policies of ministers in various situations. Only one-fourth of those questioned replied. It is presumed that the remainder failed for reasons such as lack of secretarial assistance, desire to protect the privacy of such relationships, and lack of records of such cases. A variety of problems were presented—those of adjustment between husband and wife, those of protection of minors and adjustment between parents and children, sex problems of the unmarried, and problems of engagement and contemplated marriage. Various methods of treatment are reported, with considerable emphasis upon the opportunity offered to persons in trouble to talk over their difficulties with the minister who is also a friend. Social and psychiatric agencies are also employed, with pastors making increasingly direct use of the "new psychology." The book concludes that the minister still plays an important part in the field of family relationships, because he is personal and traditionally friendly. There is need of further training to supplement this initial advantage, which is being stressed in some degree in the present-day training of theological students. There is special need of this sort of ministerial service in small communities. A new attitude of understanding is being developed toward unfortunate individuals who commit the sexual indiscretions so harshly condemned by Puritan morality. Ministers need a

better technique toward the performances of marriage.—*H. L. Stratton* (Worcester, Mass.).

4902. **Dobbs, H. A.** Recreation and the social readjustment of certain individuals. *Soc. Service Rev.*, 1931, 5, 47-56.—(*Soc. Sci. Abst.* III: 16408).

4903. **Eyrich, M.** Kriminal-biologische und soziologische Untersuchungen an Mördern und Totschlägern. (Criminal-biological and sociological investigations of murderers and homicides.) *Bl. f. Gefängnis.*, 1930, 61, 247-262.—This constitutes the report incorporating the results obtained through study of the murderers and various orders of homicides who entered the Ludwigsburg prison in the years 1924-28. Among the 34 subjects examined there were found, according to the classification scheme of Kretschmer: 3% pycnics, 26% leptosomes, 29% athletics, 9.5% hypoplastics, 13% mixed forms, 19.5% uncharacteristic. In the case of more than a third of the subjects there were discovered endogenous mental diseases among the near relatives, involving a series of unequivocal and typical schizophrenic processes, also epilepsy; in every third subject there was evident dipsomaniac trend. Only five men had accomplished their killings in a coolly premeditated manner: the others had carried out their crimes in a thoroughly psychopathic fashion. There were also found cases which seemed to fit in with the Lombroso theory of the "born" criminal; a few individuals were of the rugged-athletic constitution plus the most severe hypoplasticity. Others were of the hypoplastic-asthenic form, dull affectively, weak-minded, impulsive. Of a group of seven who had killed their inamoratas the majority were autistic, strongly egocentric, weak, discontented, socially ambitious but unsuccessful psychopaths.—*H. Brandstätter* (Ichtershausen 1. Thüringen).

4904. **Faris, E.** Borderline trends in social psychology. *Publ. Amer. Sociol. Soc.*, 1931, 25, 36-42.—(*Soc. Sci. Abst.* III: 16248).

4905. **Frank, B.** Mental level as a factor in crime. *J. Ju. Res.*, 1931, 15, 192-197.—The report concerns 401 delinquents admitted to the New Jersey Reformatory at Rahway in 1930. The group as a whole proved not to be predominantly mentally deficient. Offenses such as forgery and embezzlement occurred somewhat more frequently among the intellectually superior than among the inferior group, whereas for assault, rape, and other sex crimes the reverse obtained. The mentally low-grade showed a relatively greater incidence of recidivism, of conduct such as results in repeated arrests, and of disorganized family and home conditions.—*H. L. Koch* (Chicago).

4906. **Frank, J.** Freud and the law. *Psychoanal. Rev.*, 1931, 18, 247-249.—Address at seventy-fifth birthday dinner in honor of Freud. Freud's contribution to law is an indirect one. He dissipated legal myths such as the one that does not recognize that the personality of judges is the pivotal factor in decision making.—*D. Shakow* (Worcester State Hospital).

4907. **Garrison, K. C., & Mann, M.** A study of the opinions of college students. *J. Soc. Psychol.*, 1931, 2, 168-178.—A list of 25 statements covering



religious and social questions was submitted to 258 college students from the four classes at North Carolina State College. Ratings were made on a five-point scale. The average rating and average deviation for each statement were calculated. No general differences between the more mature students and the younger ones appeared. Some individual statements reflected differences of opinion between the two groups.—*E. B. Newman* (Frankfurt).

4908. *Giannitrapani, A. Vers la synthèse du problème pénal.* (Conclusions concerning the crime problem.) *Rev. int. de droit pénal*, 1931, 8, 76-99.—(*Soc. Sci. Abst.* III: 16353).

4909. *Goitein, P. L. People of the universe (Kosor). A novel approach in dramatic analysis.* *Psychoanal. Rev.*, 1931, 18, 251-305.—An analysis of the Croatian tetralogy of Kosor.—*D. Shakow* (Worcester State Hospital).

4910. *Groves, E. R., & Groves, G. H. Sex in marriage.* New York: Macaulay, 1931. Pp. 250. \$3.00.—A popularly written account of the normal physiological adjustments and techniques necessary to achieve satisfactory sexual life in marriage.—*R. R. Willoughby* (Clark).

4911. *Guilford, J. P. Racial preferences of a thousand American university students.* *J. Soc. Psychol.*, 1931, 2, 179-204.—In this article, the writer presents the results of the application of a refinement of the paired-comparison method to the study of racial attitudes. A list of fifteen "races" was presented by this method to students in seven American colleges distributed over the entire country. The results obtained from each school were found to be very reliable, with a coefficient of self-correlation of over .995 in all cases except one. There was also a considerable community of opinion between students of different colleges, amounting to about 98%, except in the case of one school, New York University. As a measure of tolerance the writer suggests that the standard deviation of the values given to different races is more accurate than the total range used by Thurstone. On the other hand, there is good evidence that this may measure the heterogeneity of the group rather than the tolerance of its members. It was found further that, while the more extreme opinions were less variable, those which represented preference or "likes" were much less variable than those representing "dislikes." A very definite relationship was found between the percentage of the students and the racial preferences expressed, although the incompleteness of the data makes the results only partially reliable. If this factor is partialled out, the racial composition of the student's environment appears to be of only slight significance. Correlations were also found between the racial preferences and the 1929 and 1930 immigration quotas. These correlations are highest with the fourth roots of the racial ancestry and quotas respectively. The methods of this study might well stand as a model for further work.—*E. B. Newman* (Frankfurt).

4912. *Hambly, W. D. Serpent worship in Africa.* Chicago: Field Museum, 1931. Pp. 93. \$.75.—(Not seen).

4913. *Hankins, F. H. The racial basis of civilization.* New York: Knopf, 1931. Pp. x + 389. \$2.75.—"The pernicious propaganda relating to the Nordic doctrine before, during, and since the war is the excuse for this book." Part I is a critical history of the theories of Aryanism, Gobinism, Teutonism, social selectionism, Celticism, Gallicism, and Anglo-Saxonism wherein these misconceptions are subjected to self-criticism and shown to be grossly inconsistent and mutually contradictory. The same may be said of the newer American versions of these very old doctrines as advanced by Burgess, Brigham, Burr, Grant, Eckenrode, MacDougall and Stoddard. Part II is a constructive study of the concept of race. The basic fact necessary for an understanding of racial matters is the fact of human variability. Even if it is true that given traits are more or less characteristic of certain races, individual variability causes overlapping which makes separation of types impossible, and cross-breeding from time immemorial has kept races in a constant state of flux, so that there is no such thing as a "pure" race. All human qualities are found among all races of men, in varying degrees. Some races may excel in one respect, some in another. Race cannot be identified with political nation. High culture is produced by combination of well-endowed races; by the multiplication of the more able, regardless of race, and the discouragement of the multiplication of the less able. The Nordic race, although one of the world's premier races, is not the only superior race, nor has it a special historical rôle. All important historical groups have been heterogeneous in racial composition; all areas of high culture have been areas of race mixture.—*M. P. Montgomery* (Faribault, Minn.).

4914. *Hoffmann-Krayer, E. Individuelle Triebkräfte im Volksleben.* (Individual motivating forces in the folk life.) *Arch. suisses de trad. pop.*, 1930, 30, 169-182.—(*Soc. Sci. Abst.* III: 16259).

4915. *Höpler, E. Wirtschaftskrisen und Kriminalität.* (Economic crises and criminality.) *Arch. f. Krimin.*, 1930, 87, 193-213.—The topic of this statistical study is the effect of unemployment on crime. The author shows by means of tables and graphs the correlation between increase of crime and incidence of unemployment in Austria. The frequency of particular classes of crimes is considered.—*P. C. Squires* (Clinton, N. Y.).

4916. *Institute for Juvenile Research. Outline for recreational interview.* (Forms for 9-16 years; 17 years and over; adults.) Chicago: Stoelting, 1931.—The general purpose of all three of these outlines is to secure information concerning the individual's recreational experience, interests, likes and dislikes, attitudes, etc.—*L. A. Averill* (Worcester State Normal School).

4917. *Kaltenbach, H. Die Bedeutung der Graphologie für die Vererbungswissenschaft.* (The significance of graphology for the science of heredity.) *Zsch. f. d. ges. Neur.*, 1930, 128, 198-214.—(*Bibliographia Eugenica*).

4918. *Kroeber, A. L., & Waterman, T. T. Source book in anthropology.* (Rev. ed.) New York: Har-

court, 1931. Pp. viii + 571.—Of the 54 original sections, 20 have been retained unchanged, 16 have been altered, mostly by abbreviation and in one or two cases by addition, 18 have been omitted, and 19 have been added. The basis of selection is usefulness in illuminating some significant principle through the medium of concrete facts. The classification, with the number of selections under each category, is as follows: history of anthropology, 2; evolution, 5; heredity and race, 9; pre-history, 3; subsistence and material culture, 7; social culture, 10; esthetic and religious culture, 11; dynamics of culture, 8. An alternative classification is as follows: environment, 6; archeology, 10; invention, independent origin, 10; diffusion, 6; political institutions, 6; psychology, individual and racial, 4; psychology, social, 13; method, 8; statistical method, 6.—*R. R. Willoughby* (Clark).

4919. **Leon, P.** The work of art and the esthetic object. *Mind*, 1931, 40, 285-296.—The artist makes the work of art, but he does not make the beauty of the esthetic object. The imagination is a kind of supra-sensual a priori sense, and beauty or the esthetic object of the imagination is a supra-sensual sensum.—*H. Helson* (Bryn Mawr).

4920. **Lévy-Bruhl, L.** La catégorie affectif du surnaturel. (The affective category of the supernatural.) *Rev. phil.*, 1931, 56, 321-340.—The author seeks to find the common characters of manifestations and practices relative to invisible powers, and to the representation of the supernatural world. This representation is, among primitives, the object of constant experience; they feel themselves in incessant contact with these supernatural powers which they fear, which are generally invisible and impalpable, but which are neither deaf nor mute. The dominant note in representations of invisible powers is anxious waiting; a sum total of emotional elements in which the author believed he could discern an element of specific generality which permitted him to relate them to the affective category of the supernatural.—*Math. H. Piéron* (Sorbonne).

4921. **Louittit, C. M.** Racial comparisons of ability in immediate recall of logical and nonsense material. *J. Soc. Psychol.*, 1931, 2, 205-215.—Four tests of ability in immediate recall were given to over 400 12-year-old students in the public schools of Hawaii (all in Honolulu) and to about 150 university students. The students were classified into four approximately equivalent groups of white, Japanese, Chinese and Hawaiian ancestry. Of the 24 possible comparisons between the white children and those of other races, but four were significant, and among these each race exceeded once, white over Hawaiian, and Hawaiian, Chinese and Japanese over white. Differences between the sex and age groups were larger than between the racial groups. It is concluded that there are no significant racial differences.—*E. B. Newman* (Berlin).

4922. **Luxenburger, H.** Anlage und Umwelt beim Verbrecher. (Predisposition and environment in the criminal.) *Allg. Zsch. f. Psychiat.*, 1930, 92, 411-438.—(Bibliographia Eugenica).

4923. **McCormick, M. J.** A scale for measuring social adequacy. Chicago: Stoelting, 1931.—Measures quality of neighborhood, educational status, civic and occupational status, material status of the home, cultural and social influences, etc.—*L. A. Averill* (Worcester State Normal School).

4924. **McCullough, R. S.** Mental hygiene and delinquency. The use made of standardized tests at the Indiana Boys' School. *Indiana Bull. Charities & Corrections*, 1931, Nos. 191-192, 252-258.—(*Soc. Sci. Abst.* III: 16410).

4925. **Metcalf, J. T.** Empathy and the actor's emotion. *J. Soc. Psychol.*, 1931, 2, 235-238.—It is held that a good actor possesses a dual consciousness, one part of which embodies the rôle that he is acting. In this he must imagine accurately the feeling which he is to portray. The other part, his normal awareness, is detached and devoted to the requirements of the stage and the appreciation of the audience. If this latter is aware that the audience is perceiving the emotion which the other part of his consciousness is imagining or pretending, his feeling tone is pleasant; non-correspondence is unpleasant.—*E. B. Newman* (Berlin).

4926. **Morf, G.** Über völkische Eigenarten. (Concerning race peculiarities.) *Psychol. Rundschau*, 1931, 3, 97-103.—In a previous article application was made of Jung's type studies to the developmental process of the child. The author sees an interesting application to race psychology. Using Jung's classification—the perceptive, the emotional, the intuitive, the intellectual—he sees in southern European peoples the perceptive type, sensitive to sensory impression, in the northern types (Scandinavian and Anglo-Saxon) the feeling type, judging by sentiment rather than by reason. The intuitive type is found in the Russian and the Jew, the intellectual type in the Germanic peoples. The latter furnish the world's philosophers and thinkers in fields both academic and technical. The author analyzes each group according to this classification and accounts for the distinctive contributions of each nation.—*A. B. Herrig* (Michigan Central State Teachers College).

4927. **Morselli, E.** Sessualità umana. (Human sexuality.) Turin: Bocca, 1931. Pp. 173. Lire 20.—This book is organized in three parts: (1) the biopsychology of sexuality (intelligence and sex, the human climacteric, glandular transplantation, etc.); (2) the psychophysiology of sexuality (sex education, sex life, etc.); (3) the psychopathology of sexuality (homosexuality, the connections between sex perversions and criminality, etc.).—*A. Angyal* (Turin).

4928. **Muckermann, H.** Ursprung und Entwicklung der Eheberatung—tatsächliches und kritisches. (Origin and development of marriage counseling—practical and critical.) *Kommende Geschlecht*, 1931, 6, 1-36.—(Bibliographia Eugenica).

4929. **Neumann, J. I.** Internationaler religions-psychologischer Kongress 25.-30. Mai 1931 in Wien. (First international congress of religious psychology, Vienna, May 25-30, 1931.) *Zentbl. f. Psychotherap.*, 1931, 4, 401-407.—This Congress was called

and presided over by Karl Beth, president of the International Society of Religious Psychology and founder of the Institute of Religious Psychology in Vienna. It stressed the common interests of psychology and religion, and the contributions which the new psychology can make to religious education. The meeting brought together workers from many countries; of various religious faiths (Protestant, Catholic, and Greek Orthodox); and of many different callings, among them pastors, educators, psychologists, criminologists, and psychotherapists. Neumann gives, with critical comments, short summaries of the papers, particularly those of psychological and pedagogical interest. In conclusion, he emphasizes the need of more psychological training for theologians, in order to avoid the danger of dogmatism, and wishes that all theological faculties might have an institute of religious psychology similar to that in Vienna.—*M. E. Morse* (Catonsville, Md.).

4930. Odum, H. W. Folk and regional conflict as a field of sociological study. *Publ. Amer. Sociol. Soc.*, 1931, 25, 1-17.—(*Soc. Sci. Abst.* III: 16252).

4931. Papillault, G. Des instincts à la personnalité morale. (Some instincts of the moral personality.) Paris: Maloine, 1930. Pp. 207.—(*Bibliographia Eugénica*).

4932. Park, R. E. Personality and cultural conflict. *Publ. Amer. Sociol. Soc.* 1931, 25, 95-110.—(*Soc. Sci. Abst.* III: 16267).

4933. Price, M. T. The concept "culture conflict": in what sense valid? *Soc. Forces*, 1930, 9, 164-167.—The author opposes the use of the compound term "culture conflict," because he regards its components as belonging to two different orders of phenomena. Conflict refers to the behavior of individuals and culture to the superorganic. If "culture conflict" is to be construed so broadly as to include all conflict caused in part by culture, the term becomes so inclusive as to be of doubtful value.—*D. Katz* (Princeton).

4934. Quinan, C. The handedness and eyedness of speeders and of reckless drivers. *Arch. Neur. & Psychiat.*, 1931, 25, 829-837.—Of 2,331 university students, 19% were R L sinistrals. Among 354 speeders and 121 reckless drivers the R L percentages were 26.8 and 45.4 respectively. 6.7% of the speeders and 5.7% of the reckless drivers were left-handed men—LL plus LR.—*V. M. Jones* (Boston Psychopathic Hospital).

4935. Randolph, V. The Ozarks; an American survival of primitive society. New York: Vanguard, 1931. Pp. ix + 310. \$5.00.—An account of the customs and mores of the Ozark country by a student who has lived in close association with the natives for about ten years. Special attention is given to the social organization and family life, to folk beliefs and literature, and to the dialect; there are also chapters on the history of the region, the recreational "party," moonshining, marksmanship, fishing, treasure legends, and the critical interaction between the natives and the increasing representation of modern America now using the Ozarks as a summer playground.—*R. R. Willoughby* (Clark).

4936. Reid, L. A. A study in aesthetics. London: Allen & Unwin, 1931. Pp. 415. 15/.—For abstract see V: 4212.—*F. C. Bartlett* (Cambridge, England).

4937. Reynolds, C. N. Competition and conflict between races of differing cultural standards. *Publ. Amer. Sociol. Soc.*, 1931, 25, 125-135.—(*Soc. Sci. Abst.* III: 16280).

4938. Robinson, E. S. The contributions of psychology to social work. *Proc. Nat. Conf. Soc. Work*, 57th session, Boston, 1930, 536-543.—The education of the social worker should be grounded in the sciences and psychology should have a central place in such a program. Psychological training may contribute to the equipment of the social worker methods of attacking problems, a more critical sense of fact, and a better insight into himself.—*D. Katz* (Princeton).

4939. Rüdín, —. Wege und Ziele der biologischen Erforschung der Rechtsbrecher mit besonderer Berücksichtigung der Erbbiologie. (The ways and goals of the biological investigation of the criminal, with special reference to the biology of inheritance.) *Monatssch. f. Krim.-psychol. u. Strafrechtsref.*, 1931, 22, 129-135.—There is presented a research program for determining the as yet unknown biological presuppositions that should control the punishment of social offenses. The aim should be to understand the biological substrate as thoroughly as the environmental factor. The author devotes considerable attention to the problems involved in mental weakness and psychopathy. There must be carried out research showing the correlation between recidivism and inheritance. The practical goal to be attained is a more certain social prognosis. The relations between clinical type, inheritance type, and criminal type must be discovered.—*W. Beck* (Leipzig).

4940. Severance, H. O. The story of a village community. New York: Stechert, 1931. Pp. 178. \$2.00.—This book is a contribution to the history of pioneer village life. Walled Lake, Michigan, is a representative mid-western community of a type that is passing. The story is a cross-section of its business development, social and political activities, school and church life, reconstructed in detail from the time of the first settler to the emergence of the village as a modern, completely urbanized community. The book contains an extensive bibliography of villages and village communities classified by periods and also by geographical distribution, and maps of the Walled Lake district.—*M. P. Montgomery* (Faribault, Minn.).

4941. Sighele, S. L'intelligenza della folla. (The intelligence of the mass.) Turin: Bocca, 1931. Pp. 182. Lire 72.—In this book, the author is concerned with the following questions: the problem of the morality of the mass mind; art and the mass; the mass and Gabriel D'Annunzio; public opinion; parliament and mass psychology; the intelligence and morality of the mass. The last chapter contains the record (letters and article) of a discussion by Sighele, Ferri, Tarde, Viazzi and Ventura of the fundamental questions of mass psychology.—*A. Angyal* (Turin).



4942. Specklin, P. La psychologie de l'assuré social. (The psychology of persons having social insurance.) *Gaz. méd. du Centre*, 1931, 36, 14-19.—A critical study of the works of Prinzhorn and Liek on the psychological changes which proceed from the laws of social insurance in Germany and which counteract the effect of the medical and surgical needs of those insured.—*Math. H. Piéron* (Sorbonne).

4943. Stolz, A., & Manuel, H. T. The art ability of Mexican children. *School & Soc.*, 1931, 34, 379-380.—82 Mexican and 103 non-Mexican white children enrolled in a junior high school were given the Meier-Seashore Art Judgment and the McAdory Art Tests. Both groups averaged considerably below the author's norms. In the case of the Meier-Seashore Test the results, however, favor the Mexican; in the case of the McAdory, the non-Mexican, the group differences being statistically significant only in the former case. Since the correlation of the art tests with intelligence is very low, it is improbable that the fact of the lower mental-test standing of the Mexicans can materially aid in the interpretation of the findings.—*H. L. Koch* (Chicago).

4944. Sullenger, T. E. The newsboy as a juvenile delinquent. *J. Jur. Res.*, 1931, 15, 215-219.—The author points out the high delinquency rate among the newsboys who sell on the street corners and attempts an interpretation of this fact.—*H. L. Koch* (Chicago).

4945. Sylvus, N. *Lehrbuch der wissenschaftlichen Graphologie*. (A text-book of scientific graphology.) Leipzig: Reclam, 1931. Pp. 222. M. 1.20.—The book is divided into four parts: the historical development of the graphological method and its practical value; the physiology of writing; the psychology of writing; and finally, the practical application of the given rules. In the first part, Sylvus treats of the oldest evidences of graphological consideration and goes into their main doctrines. Then he reviews briefly the practical uses of graphology. In the second part, he explains the methods existing hitherto and discusses the different national alphabets (the book contains examples of the scripts of 12 different nations); then he takes into account the technique of modern writing and the development of handwriting; next, he attempts to find the physiological explanation for the development of the individual writing signs, which, in the next part, he makes an effort to explain psychologically, closely following the individual psychology of Alfred Adler. His effort thenceforth is to replace the existing, rather intuitively tangible criteria by scientifically tangible and demonstrable criteria, the most important of which he believes to be the character of the direction of the writing (centrifugality and centripetality) and the apportionment of strength while writing. Finally, in the last part, he discusses not only means of interpretation, but also the relation between handwriting and profession, sex life and age, criminals, sickness, etc., thereby clearly showing that what he chiefly wishes to find in graphology is the diagnosis of character.—*H. Morlinghaus* (Rügge, Schleswig).

4946. Thurstone, L. L. The indifference function. *J. Soc. Psychol.*, 1931, 2, 139-167.—In this study an attack is made on the fundamental economic problem of the relation of the supply of a commodity to the satisfaction derived from that supply. This relation has been previously shown in the hypothetical "demand" curve. Starting from five postulates, the writer derives a "satisfaction curve" which expresses the fact that the satisfaction derived from any commodity is proportional to the logarithm of the quantity of the commodity. From this equation is derived the "indifference curve" which shows the respective amounts of two commodities which afford the individual equivalent satisfaction. In its exponential form this takes the form  $x_1^{k_1} \cdot x_2^{k_2} = m$ , in which  $x_1$  and  $x_2$  are the quantities of the two commodities. The exponents,  $k_1$  and  $k_2$ , are constants dependent on the individual and his preference for the two commodities, while the constant  $m$  designates the total satisfaction represented by a particular curve. This expression was tested by a modification of the constant method in which the subject was asked to indicate his preference either for a standard quantity, such as eight overcoats and eight hats, or for a variable quantity such as twelve overcoats and six hats. The experimental results for one subject are essentially in agreement with those expected from the equation.—*E. B. Newman* (Frankfurt).

4947. Tibbitts, C. Success or failure on parole can be predicted; a study of the records of 3,000 youths paroled from the Illinois State Reformatory. *J. Crim. Law & Crimin.*, 1931, 22, 11-50.—(*Soc. Sci. Abst.* III: 16355).

4948. Tripp, E. *Untersuchungen zur Rechtspsychologie des Individuums*. (Research in the psychology of justice of the individual.) *Zsch. f. angew. Psychol.*, Beiheft 56, 1931. Pp. 141.—(*Soc. Sci. Abst.* III: 16515).

4949. Trunk, H. *Zur Kennzeichnung krimineller Persönlichkeiten vermittels der Ewaldschen Charakterstrukturformeln*. (On the recognition of criminal personalities by means of Ewald's formula for character structure.) *Zsch. f. d. ges. Neur.*, 1930, 131, 375-391.—(*Bibliographia Eugenica*).

4950. Von Hentig, H. *Inwelt und Umwelt*. (The inner and the outer worlds.) *Monatssch. f. Krimpsychol. u. Strafrechtsref.*, 1931, 22, 1-7.—Leading criminogenic factors of the environment are economic need, execution processes of the law, family conditions and crowded living quarters. Both the mentally deficient and the criminal should be sterilized. The state should proceed to this task in a scientific, not in an emotional manner. Only through such means can society be improved.—*W. Beck* (Leipzig).

4951. Watts, R. E. The influence of population density on crime. *J. Amer. Statis. Asso.*, 1931, 26, 11-20.—(*Bibliographia Eugenica*).

4952. Woodard, J. W. The biological variate and culture. *Soc. Forces*, 1930, 9, 10-20.—The culture determinists err in their disregard of the influence of biological factors upon the course of civilization. It is a fallacy to assume that in a given situation culture always throws up the necessary man or men to

give expression to the cultural needs of the time. But it is also fallacious to overlook the importance of cultural factors and to accept the great man theory of history. Biological factors such as the individual variate, the general level of competency of a group, and the range of variation within the group influence culture, especially the rate of achievement; whereas cultural factors determine the content of the individual's contribution.—*D. Katz* (Princeton).

4953. Yoshimasu, S. Moral sentiment of juvenile delinquent. *Jap. J. Psychol.*, 1931, 6, 75-94.—Various methods which have been used to test the moral sentiment of young people are reviewed and criticized. According to the author, these methods are nothing but the tests of moral knowledge. They do not test the moral sentiment itself. Crimes are very often committed by those who are quite well acquainted with moral and legal laws. Therefore the mental aspects which are more closely connected with actual criminal conducts should be investigated. Starting from this standpoint, the author put personally several questions to 119 young (aged 14-23) convicts about their experiences directly before and after their offences. The answers show that almost all of the convicts committed the crimes without any sense of "bad," at best only with the fear of being detected; while after the offences those who have "qualms of conscience" increase remarkably in number. Thus the mental attitudes before and after the offense are quite different, and this is an essential point to be made clear.—*S. Takagi* (Kyoto).

4954. Young, K. Contribution of psychiatry to the study of group conflict. *Publ. Amer. Sociol. Soc.*, 1931, 25, 111-124.—(*Soc. Sci. Abst.* III: 16277).

[See also abstracts 4660, 4697, 4698, 4765, 4766, 4767, 4768, 4769, 4784, 4802, 4821, 4837, 4854, 4971, 4976, 4977, 4978, 4981, 4989, 4990, 4991, 4992, 5002, 5023.]

#### INDUSTRIAL AND PERSONNEL PROBLEMS

4955. Burnett, G. V., & Older, E. Occupational orientation. Los Angeles: Society for Occupational Research, 1931. Pp. 609.—Brief history of the vocational guidance movement. Occupations are classified into twenty-four groups and discussed uniformly and with considerable completeness. Each section begins with a general description of the group of occupations, followed by the various sub-classes. For each sub-class there is a uniform outline, involving definition, analysis, history, geographical considerations, statistics, such as the number pursuing the vocation, trends, legislative aspects, and the vocational education or other preparation necessary. The extent of the discussion varies considerably from one occupation to another. There is a bibliography attached to each chapter. In some instances, there are exercises or problems for the reader, such as locating local industries of the type in question and making some analyses. The twenty-four general classes of occupations discussed, along the above lines, are as follows: animal husbandry, plant agriculture, food and shelter, textile-clothing, building and construction, technical woodworking, mechanico-metal, electrical,

artistry, printing and publishing, chemical-mineral, transportation, selling-merchandising, finance and accounting, clerical, musical, acting and entertaining, teaching, platform and pulpit, literary and library, legalistic, public protection, health and healing, social service.—*H. E. Burt* (Ohio State).

4956. De Quay, —. Examen psychotechnique des tisserands. (Psychotechnical examination of weavers.) *Rev. sci. du trav.*, 1930, 2, 365-375.—The author found in a group of apprentice weavers, to whom he applied a series of tests, a satisfactory agreement between the psychotechnical examination and the judgment of the employers.—*Math. H. Piéron* (Sorbonne).

4957. Diez Gasca, M. Ricerche sulle attitudini al lavoro di modista. (Researches on professional attitudes in millinery work.) *Org. sci. del lavoro*, 1931, 9, 3-8.—The author carried out investigations on the attitudes of pupils in a millinery school toward their profession. The results, which were obtained by the use of psychotechnical methods, have a very high correlation with the quality of the work exhibited by the pupils in the military school, which fact demonstrates the applicability of the test methods employed. The administration of the attitude test described by the author requires about half an hour.—*A. Angyal* (Turin).

4958. Ehinger, G. Déclin des aptitudes avec l'âge. (The decline of aptitudes with age.) *Arch. de Psychol.*, 1931, 23, 67-73.—Does the decline of aptitudes vary with the environment and the kind of life led by the subjects? Does work in a factory use up the worker's natural powers to an excessive degree? In order to answer these questions, which had arisen as a result of certain previous experiments, the author compared the decline obtained from 181 workers with that obtained from 152 women of environment termed "cultivated." The ages varied from 25 to 50. In both groups the same five tests were used, which dealt with motor functions: Walther's discs, cutting out, beads, dotting, and tapping. A comparison of the results obtained from the two groups showed immediately that the intellectual women had a performance which was superior to that of the working women for all the tests with the exception of that of the discs, which resembled a form of activity with which all the factory women examined were familiar. As to the question of the decline of ability with age, the tapping and the cutting out tests did not show any noticeable decrease in either type of women. However, the other three tests showed a very clear-cut decline, which began later, however, for the intellectual women than for the others, being at the age of 35 for the former and at 30 for the latter. Therefore, it would seem that the age curve varies with the kind of life led by the subjects. In passing, the author asks this question: Are good tests of development also good tests of regression? It seems that this may be true for certain tests but not for others.—*M. R. Lambercier* (Geneva).

4959. Frain, H. L. Base rates vs. bonus payments in wage comparisons for standard machine-tool occupations. *Person. J.*, 1931, 10, 189-197.—Hourly

base rates are frequently used in wage comparisons designed to show earning capacity. Whatever merit such comparisons may have where a straight time method of wage payment is involved does not logically carry over to comparisons involving earnings under incentive methods, unless certain assumptions with regard to actual results and experience under these methods are valid. An examination of such assumptions is made, in the light of two wage surveys covering seven standard machine tool occupations in metal manufacturing firms in Philadelphia. These data indicate that pragmatic results support logic in disqualifying base rates as evidence of earning capacity.—(Courtesy *Person. J.*)

4960. Gemelli, A., & Galli, —. *Sur l'adaptation de l'activité humaine à l'activité de la machine.* (On the adaptation of human activity to the activity of the machine.) *Rev. sci. du trav.*, 1930, 2, 323-353.—Study on the work on moving belts of factory workers by means of tests and comparisons with free workers. The authors wished to study especially the relation between the rhythm and rapidity of the machine and the rhythm and speed of human work. They were able to establish the existence of two opposite types of workers; those who worked better at an obligatory rhythm and found that form of work less difficult, and those who worked better at a free rhythm. It appears from these experiments that there is an optimum rhythm of the machine assuring the best adaptation of the worker, this rhythm being variable according to the individual.—*Math. H. Piéron* (Sorbonne).

4961. Lahy, J. M. *La valeur professionnelle des travailleurs appréciée à l'aide des méthodes de la psychotechnique.* (The professional value of workers evaluated by means of psychotechnical methods.) *Rev. sci. du trav.*, 1930, 2, 400-411.—The factor which makes the selection of personnel difficult is that the establishment of psychotechnical methods must be controlled by the production of the subjects in the enterprise. But the exact evaluation of this production is difficult and unstable, and the author thinks that the production measured by technicians through the intermediary of salary should be studied as one studies psychological tests.—*Math. H. Piéron* (Sorbonne).

4962. Roubinovitch, J. *Rationalisation et surmenage.* (Rationalization and overwork.) *Psychol. et vie*, 1931, 5, 133-135.—The rationalization of work contributes efficaciously to the fight against overwork. It fixes the aptitudes of each child for the choice of study for a profession. Rationalization will be the regulator which will place each individual in the conditions of work in which his personal characteristics will permit him to give, with the least fatigue, the most service to society.—*Math. H. Piéron* (Sorbonne).

4963. Schreider, —. *Les facteurs affectifs du travail salarié.* (The affective factors of salaried work.) *Rev. sci. du trav.*, 1930, 2, 411-427.—The affective tendencies are very important in human activity. The author states, from personal observation and as the result of some recent inquiries, the rôle of affective factors which influence work; the rôle of

salary, rôle of joyous work, rôle of the group.—*Math. H. Piéron* (Sorbonne).

4964. Shaffer, W. *Selection of personnel by psychological methods.* *Kalends*, 1931, 10, (9) 3-5.—On the basis of the following data Army Alpha, a cancellation test, and the Dunlap omitted letter test (marking in a word the letter left out of the same word pied) are believed to be of value for the selection of proof-readers, and have been incorporated into the employment program of the Williams & Wilkins Company: Four excellent proof-readers score 190, 143, 138, 130 on Alpha, 22, 19, 43, 30 on cancellation, and 48, 41, 54, 43 on omitted letter. The corresponding scores for four fair workers are 139, 125, 114, 99; 21, 25, 17, 28; 34, 23, 28, 19. Those for two inefficient workers are 102, 72; 11, 18; 10, 9.—*R. R. Willoughby* (Clark).

4965. Thurstone, L. L. *A multiple factor study of vocational interests.* *Person. J.*, 1931, 10, 198-205.—The present study was made on data collected by E. K. Strong of Stanford University on the interests of eighteen professions. Strong has tabulated the interest correlations for all possible pairs of these professions. By applying a new multiple factor method to these interest correlations, it has been found that the correlations can be accounted for by assuming four factors, which may be labelled (1) interest in science, (2) interest in language, (3) interest in people, and (4) interest in business. Each profession is described in terms of these four factors. The vocational interests of each person can be described in terms of the same four factors.—(Courtesy *Person. J.*)

4966. Walther, L. *Die Arbeitspsychologie. (Die Technopsychologie der industriellen Arbeit.)* (Psychology of work. Techno-psychology of industrial activity.) *Psychol. Rundschau*, 1931, 3, 118-122.—The appearance of the science of techno-psychology is traced from the epoch of the World War, when demands were made upon psychology to help solve problems of the individual worker. The article draws the limits of this field in discrimination from psychology and from technology and emphasizes its value in solving the problems of modern labor.—*A. B. Herrig* (Michigan Central State Teachers College).

#### CHILDHOOD AND ADOLESCENCE

4967. Abramson, J. *L'hygiène mentale de l'enfant en Allemagne. Rééducation et orientation professionnelle.* (Mental hygiene of the child in Germany. Reeducation and vocational orientation.) *Hygiène ment.*, 1931, 26, 69-92.—Account of a study trip to the principal centers of Cologne, Berlin, and Mainz, with special attention to the education of backward children and vocational orientation.—*Math. H. Piéron* (Sorbonne).

4968. Allers, R. *Ein schwer erziehbarer Junge.* (A difficult child.) *Vjsch. f. Jugendk.*, 1931, 1, 140-143.—A clinical history taken from the author's book *Das Werden des sittlichen Person.* A five-year-old boy was expressing through his conduct his jealousy of a younger brother. He was cured by pro-



viding for his need of affection, and also by raising his self-confidence through giving him satisfactions in the way of accomplishment and recognition. An indispensable condition for success in treating such cases is the cooperation of the parents. An older child occasionally attains a relative independence and succeeds without the parents' aid; but even that result is not entirely happy, because he is thereby inwardly estranged from them, although the outer forms of relationship may be retained. Nevertheless, it is more important to protect the young person from lifelong suffering than to spare the sensibilities of the parents.—*M. E. Morse* (Catonsville, Md.).

4969. **Anderson, J. E.** *The methods of child psychology.* In *A Handbook of Child Psychology*. Worcester, Mass.: Clark Univ. Press, 1931, 1-27.—The tendency of the modern method of approach is toward the establishing of norms, with individual differences and groups of differences. The techniques available include incidental observation; biography; systematic observation; questionnaire; case history; direct measurement and simple tests; tests of complex functions; ratings; experiment; experiment involving random control groups; experiment involving paired control groups; control by statistical devices. Material may be found in recorded events, products of the child, his behavior, introspection and memories of the child or adult, and memories of those associated with him. Control of conditions in advance is to be preferred to the collection of uncontrolled data.—*M. P. Montgomery* (Faribault, Minn.).

4970. **Barker, R. H.** *The effect of an unsatisfactory relationship of brother to brother on the development of personality.* *Soc. Forces*, 1930, 9, 85-91.—The ascendancy of a physically stronger and older child in all his relations with his brother and the resulting sense of inadequacy in the weaker boy are traced from infancy to manhood. Attention is called to the importance of the relationships between children within the family in the development of the child's personality.—*D. Katz* (Princeton).

4971. **Bühler, C.** *The social behavior of the child.* In *A Handbook of Child Psychology*. Worcester, Mass.: Clark Univ. Press, 1931, 392-431.—Viewing social behavior, first, in the developmental aspect, it is found that the child begins to react to others at about six weeks, first by smiling. At about five months he discriminates between various expressions, tones, and gestures; at six months he initiates contact with other children and exhibits satisfaction in successful aggression. Contact is with one individual only in the first year; with two up to three years, and then with a group increasing in size with age. Need, companionship, common interest, and exchange of ideas through language are causes inducing these contacts. Superiority and inferiority, rivalry and leadership are shown during the first year. A group under age 10 needs a definite plan to keep it together; an older group keeps together when the order is left free. Girls between 11 and 13 and boys between 13 and 15 exhibit antisocial tendencies, or a "negative phase," followed in the adolescent period

by a strong attachment to a single individual. Types of social behavior in infants which seem to depend on primary disposition are the socially blind, the socially dependent, and the socially independent. At a later age may be distinguished the protective type, the popular child, the leader, the despot, and the socially unsuccessful child. These rôles depend upon the situation as well as upon the individual. A problem child may show any of these types of behavior in exaggerated form, or may deviate from the normal. Each position in the family, as eldest child, only child, and so forth, requires special social adjustment. Institutional life does not provide the conditions for the development of normal social behavior.—*M. P. Montgomery* (Faribault, Minn.).

4972. **Davidson, H. P.** *An experimental study of bright, average, and dull children at the four-year mental level.* *Genet. Psychol. Monog.*, 1931, 9, 119-289.—In view of the high percentage of failure in first-grade reading; in view of the current belief that a mental age of six is necessary to achieve success in first-grade reading; in view of the amount of time and money spent in teaching first-grade reading; and in view of the absence of knowledge as to the optimum age for beginning the teaching of reading, this study was undertaken. The experiment was arranged to "find out to what extent children with a mental age of four years could learn to read; and, in the second place, whether bright, average, and dull children, all of this mental age, would learn to read equally well under the same experimental conditions." The groups of children chosen for study showed the following composition:

|         | Range of C.A. | Range of M.A. | Range of I.Q. |
|---------|---------------|---------------|---------------|
| Bright  |               |               |               |
| 5 cases | 3-0 to 3-4    | 3-10 to 4-6   | 115 to 139    |
| Average |               |               |               |
| 4 cases | 4-1 to 4-6    | 3- 8 to 4-6   | 88 to 104     |
| Dull    |               |               |               |
| 4 cases | 5-0 to 5-6    | 3- 8 to 4-2   | 73 to 82      |

The groups met in a central meeting place for approximately 80 days for about 1½ hours per day. Each child received an individual 10-minute reading lesson each day; while the group, as a whole, usually received in addition a brief group game daily. The rest of the time was devoted to kindergarten games and play. Complete vocabulary tests and several unstandardized reading tests were given at regular intervals during the experiment, while at its close and again some weeks later a battery of tests was given. All groups were retested several months after the end of the experiment. The method of teaching was the whole-word method, but no phonics were taught. The words were presented in sentences. First, however, the children had been introduced to a graded series of "massed forms." These were made of white bristol-board washed over with black India ink to produce the desired geometrical figure or word outline. In addition to the massed-form material there were used flash cards, charts on which stories were printed, rubber type printing set, "reading rack" for use in building up sentences, books, primers, and kindergarten materials. The construction and use of these materials are described in the

monograph. As for results, the study shows that at least some children of mental age four can learn to read, and that perhaps much of the time and energy spent on the teaching of reading in the first grade are unnecessary. The conclusions state: "The bright three-year-old group was very superior to the other two groups; the average four-year-old group was appreciably superior to the dull five-year-old group." The cues most frequently used in the recognition of words appear to have been the first part of the word, the geometric shape of the word, the last part of the word, oddly shaped letters, and association in context. A negative correlation was found between chronological age and success in reading: "Brightness, then, is apparently the most important factor in reading success." Interest in reading which gives every appearance of being permanent was aroused in the children by the experiment. A review of the literature is given, with a bibliography of 116 titles. The style of the monograph enables one to get a rather clear picture of the personality of the individual children.—*F. M. Teagarden* (Pittsburgh).

4973. **Freis, R.** *Hass gegen die Eltern.* (Hatred toward the parents.) *Vjsch. f. Jugendk.*, 1931, 1, 132-137.—A psychological history showing the psychic conflicts caused by parents trying to push a child into a higher social class in order to gratify their own pride. The author traces the resultant hatred of the only daughter toward the parents from early childhood to the thirtieth year. The feeling was reinforced by their demands for affection, to which she was unprepared to respond, as her early love had centered on her grandmother; also by the fact that she was actually more intelligent than her parents. The result was that the girl lived a double life, one of extreme antagonism to the parents, and a fantasy life with a strong sex trend, in which she compensated for her feelings of inferiority. After experiences in youth which shattered her fantasy life and her parents' plans for her (which latter result secretly pleased her), she lost all self-confidence, and, although she married, she continued to live a self-centered, withdrawn life.—*M. E. Morse* (Catonsville, Md.).

4974. **Freud, A.** *Psychoanalysis of the child.* In *A Handbook of Child Psychology*. Worcester, Mass.: Clark Univ. Press, 1931, 555-567.—Every hysteria or compulsion neurosis has its origin in earliest childhood. The first hypotheses and conceptions of infantile neurosis and the extraordinary phenomena occurring during the childhood of neurotics have been expanded to include a psychoanalytic theory of the first years of life applicable both to normal and abnormal development. A brief sketch of the chief periods of childhood shows the period of infant sexuality, when the father or mother is the love object, to extend to age 5 or 6. There is a complete break between this and the second or latency period. "The amnesia of early childhood is part of the normal development of the child at this stage; and thus that gap of memory is acquired which has always constituted the greatest obstacle to the study of the prehistoric development of the individual." At this point repression, the protective mechanism, and sub-

limination are called into play. At puberty the adolescent must become erotically free of the parents, and also inwardly free from their leadership to attain normal adult sexuality. Psychoanalysis attempts to describe every psychic phenomenon from three angles; the dynamic, the topographic, and the economic. It has developed a theory of primitive drives on the basis of which tentative attempts have been made to understand learning, the special talents, genius, and also defects and intellectual inhibitions. To achieve toleration of the fundamental facts of infant sexuality and the Oedipus conflict has been a difficult process for orthodox psychology. But psychoanalysis does not permit a partial acceptance; by its very nature it appropriates the whole field of child psychology.—*M. P. Montgomery* (Faribault, Minn.).

4975. **Gesell, A.** *The developmental psychology of twins.* In *A Handbook of Child Psychology*. Worcester, Mass.: Clark Univ. Press, 1931, 158-203.—This study, after a statistical survey of the frequency, classification, and pathology of twinning, is devoted to the problem of correspondence and divergence in monozygotic twins. A summary is made of clinical reports of correspondence in physical reaction and in behavior, and also of experimental studies with co-twin control. The conclusion is indicated that the close similarity of twins would require a fundamental likeness in genetic constitution, although the influence of a practically identical physical environment must not be ignored. Values can not be disposed of by a simple assignment to "nature" or "nurture," but different kinds, intensities, and durations of conditioning must be considered, to determine their effect upon the make-up of personality and upon the configuration of specific behavior patterns. "These dynamic, biogenetic problems can be profitably explored through comparative experimental investigations of twins." A bibliography of 107 titles is included.—*M. P. Montgomery* (Faribault, Minn.).

4976. **Goodenough, F. L.** *Children's drawings.* In *A Handbook of Child Psychology*. Worcester, Mass.: Clark Univ. Press, 1931, 480-514.—Drawing, to the child, is a form of language, and like other languages is highly symbolic. Therefore, for the study of the psychological factors involved, the drawings should be judged by standards other than artistic merit. They may be classified (1) according to subjects drawn when partial or complete liberty of choice is allowed, in which case it appears that the human figure greatly exceeds all other subjects in popularity up to age 10; (2) classification of the drawing as a whole according to more or less clearly defined "developmental stages"; (3) scales for measuring artistic excellence; (4) classification by analysis of the separate elements in the drawing. A fairly close relationship exists between progress in drawing and general intellectual progress, and drawings compare very favorably with other primary group tests of intelligence. Artistic talent as a special ability rarely appears before age 12 or 13. After this age the earlier criteria do not apply. Since a mentally disordered individual usually ex-

hibits abnormality in drawing, the drawings of a maladjusted child may become material for study of his personality. Data are at present inadequate for comparison of children's drawings with those of primitive man. The report contains a complete bibliography.—*M. P. Montgomery* (Faribault, Minn.).

4977. **Heuyer, G., Roudinesco, M., & Néron, M.** Examination of delinquent children. *Rev. int. de l'enfant*, 1930, 10, 223.—(*Soc. Sci. Abst.* III: 16263).

4978. **Heuyer, G., & Abramson, J.** Le profil mental dans l'examen des jeunes délinquants. (The mental profile in the examination of young delinquents.) *Hygiène ment.*, 1931, 26, 117-120.—A mental profile is described which permits the complete study of the intellectual personality of the child in order to get rid of weaknesses and deficiencies. The profile is composed of five parts: (1) reasoning and comprehension; (2) attention; (3) memory (five aspects—memory of objects, of words, of passages, of figures, logical memory); (4) imagination (four aspects—verbal imagination, interpretation of pictures, visual imagination and complex imagination, verbal and visual); (5) concrete observation. The test takes 20 minutes. The authors have established four profiles, giving exact psychological types, supplementary to clinical study: (1) a profile corresponding to great instability, fugues and vagabondage; (2) a profile corresponding to instability and mythomania; (3) a profile corresponding to slowness of ideation and suggestibility; (4) profiles more complex corresponding to subjects whose mental level is about the same, but who differ only in details, showing that in these cases the measures taken for re-education ought to be different.—*Math. H. Piéron* (Sorbonne).

4979. **Jones, H. E.** Order of birth in relation to the development of the child. In *A Handbook of Child Psychology*. Worcester, Mass.: Clark Univ. Press, 1931, 204-241.—Statistical studies relating to birth order are peculiarly liable to error because of the many factors which must be controlled, e.g., differing definitions of "birth order"; invalidity of controls; incomplete families; the effect of mother's age, of sex differences, differential death rates, and a falling birth rate. The first born probably suffers some physical handicaps. A summary of reports of the relation of intelligence and birth order shows conflicting, and therefore negative, conclusions. Other traits more subject to environmental modification offer greater promise for investigation. No differences have yet been found in language development, nor in school achievement. Some though not all reports show poorer emotional adjustment of eldest and of only children. Psychoanalysts also disagree concerning birth order characteristics. The problem evidently requires "a combination of clinical and statistical methods, checked by accumulative data upon growing children." There is a bibliography of 88 titles.—*M. P. Montgomery* (Faribault, Minn.).

4980. **Jones, M. C.** The conditioning of children's emotions. In *A Handbook of Child Psychology*. Worcester, Mass.: Clark Univ. Press, 1931, 71-93.—The experimental studies concerned with the child's

basic emotions, their modification, and the acquisition of new emotional behavior are summarized. It is evident that a common factor in all fear-exciting situations is unexpectedness. Loud sounds do not always arouse fear, depending upon preparedness of the organism. Emotional patterns are altered by maturation. "Since practically all of the experiments on the conditioning of children's emotions have involved the use of avoidance, rather than acceptance reactions, it is possible that differences in results are due, at least in part, to some special functioning of the avoidance or defense mechanism." It must be considered also that substitute stimuli used in conditioning are not always merely incidental. The desirability is suggested of relating scientific inquiry in child study to the welfare of the individuals who serve as subjects.—*M. P. Montgomery* (Faribault, Minn.).

4981. **Jones, V.** Children's morals. In *A Handbook of Child Psychology*. Worcester, Mass.: Clark Univ. Press, 1931, 432-479.—Measurements of certain moral qualities in children—truthfulness, honesty, helpfulness, persistence—show a distribution approaching the normal curve. There has been devised no combined test to give a general morality score, comparable to general intelligence score. The techniques which have been used are measurements of actual behavior, measurements of knowledge and attitudes, rating scales, and observation and questionnaires. Physiological measurements have not proved reliable, with the possible exception of the test for deception. Judgments from facial expression are also unreliable. "Innate differences in such factors as intelligence, age, sex, race, instinctive tendencies, and possibly certain emotional and volitional factors, are related to differences in moral behavior." Experimenters are unanimous in indicating that high scores in general intelligence are to some extent accompanied by high scores in morality tests. No one innate tendency but a multiplicity of inter-acting tendencies determine moral behavior. Moral traits are not inherited; capacity for response, and for satisfaction with it, is inherited, and morality is acquired through responding to whatever situations the environment affords. The home is the most important force in the environment; then associates, church, school, recreational activities, clubs, and reading. Knowledge of right and wrong is not suddenly acquired, but grows through responses to actual situations. Behavior does not depend entirely upon knowledge or reason, but is influenced also by emotional factors. The principles of learning apply to the development of morality as well as to other behavior.—*M. P. Montgomery* (Faribault, Minn.).

4982. **Kimmins, C. W.** Children's dreams. In *A Handbook of Child Psychology*. Worcester, Mass.: Clark Univ. Press, 1931, 527-554.—There is valuable material for investigation in the dreams of normal children, but it should be borne in mind that the methods used in pathological cases do not apply. Healthy children enjoy dreams and the telling or recording of them. Investigations made in the dreams of a large group of school children from schools of all types show that the following elements



include types peculiar to different ages: wish-fulfilment and fear dreams; kinesthetic dreams; references to fairy stories; compensation dreams; dreams of bravery and adventure; school activities; cinemas; exciting books and death incidents; dreams in which conversations are recorded; and the presence of other witnesses than the dreamer. The majority may be classified as wish fulfilment. A sudden digression is far more characteristic of children's than of adult's dreams. The subjects of day-dreams (which differ only in degree from night-dreams) may be grouped according to normal stages of development; nutrition, the self attitude, the group attitude, the romance period. The compensatory function of the dream is clearly shown in the children in industrial schools. Among deaf and blind children fear dreams are more common; in the former, kinesthetic dreams are unknown. A child blind before age 5 never sees in dreams. There has been some success, but no definite conclusions, in dream control. "The dream lets in a flood of light as to the temperament and mental make-up of the child; it may also indicate the presence of repressed material in the unconscious."—*M. P. Montgomery* (Faribault, Minn.).

4983. Klüver, H. The eidetic child. In *A Handbook of Child Psychology*. Worcester, Mass.: Clark Univ. Press, 1931, 643-668.—This is an evaluation of the experimental material relating to eidetic images (EI). The methods of investigation used in the Marburg school are described in detail. It is found that children may be used in eidetic studies as profitably as adults, if proper controls are employed. Eidetic cases are rare among adults, but it does not necessarily follow that the phenomenon is a normal phase of childhood. Estimates vary between ages 12 and 6 as the point of the highest percentage of cases and the highest degree of imagery. Further research with preschool children is necessary. Scales have been devised (examples are given) for measuring the degree of imagery, from weak to strong. Two types of EI have been distinguished. In the first, the subject can produce images and banish them at will, with no stimulus but his own projected idea. The second type cannot be produced at will, often do not disappear, and change only with difficulty. There are evidently other differing types also. Present evidence points to zero correlation of intelligence with eidetic imagery. It has not yet been determined to what extent the latter is of value in education. It is important for teachers to recognize that scholarship and ethical defects may have something to do with eidetic imagery; it is an important factor in personality development. "It can not be too strongly emphasized that EI should not be misused as 'indicators of' something. . . . In our endeavor to find 'indicators' we apparently very often forget that phenomena have an *Eigenleben*, a behavior of their own."—*M. P. Montgomery* (Faribault, Minn.).

4984. Kretschmer, E. Die typischen psychogenen Komplexe als Wirkungen juveniler Entwicklungshemmungen. (The typical psychogenic complexes as effects of juvenile inhibitions of development.) *Zsch. f. d. ges. Neur. u. Psychiat.*, 1930, 127, 660-666.—The

question why there are typical psychogenic complexes was first asked by Freud and answered by him with the doctrine of infantile complexes (Oedipus and castration complex). Jung refers to the collective unconscious resulting in the eternal recurrence of typical situations in family and society as demonstrated already in the old myths. On the basis of his experience Kretschmer raises objections against the theory of the Oedipus and castration complex, especially against their general occurrence. He distinguishes two phases of the parent-child conflict, the infantile and juvenile, of which he thinks the latter more decisive for the constitution of the neurosis. In the case histories of neurotics there are found mostly conflicts of self-value connected with sexual problems. The frequency of somatic and psychic inhibitions of development during puberty is outstanding in neurotics. Remains of juvenile psychic structure and sexual developmental level are typical for neurotics. There is a persistence of the girl in her 'teens (e.g. in hysterical persons) and of the churlish manners of the adolescent boy. They meet the tasks of life with a "vital ambivalence." The conditions of aging spinisters and the panicky mood of the climacterium are to be understood on this basis. Kretschmer sees the basis for typical complexes in the failure of constitutions that have remained partly juvenile to solve increasingly difficult tasks of important periods of life. The problem is not solved on the basis of individual experiences but on the basis of total situations; the whole problem is considered by the author from the point of view of the biology of the constitution. The decisive factor is the tension between the total psychophysical constitution of a person and his whole sphere of life. In Freud's early infantile experiences one would have to see the first difficulties of adaptation of particular constitutions. It is Freud's merit to have recognized the significance of the union with the parents for the later love life and the ambivalence as a continuing disturbance. In contrast with Freud, Kretschmer recognizes in the conflict of puberty the decision for biological adaptation which represents the fundamental problem. He emphasizes that psychotherapy shows that to go back to infantile experiences is not always a decisive procedure. The vital and lasting tensions which arise out of the constitution lead to frequent failures during important periods of life.—*S. Krauss* (Frankfurt a.M.).

4985. Lewin, K. Environmental forces in child behavior and development. In *A Handbook of Child Psychology*. Worcester, Mass.: Clark Univ. Press, 1931, 94-127.—The psychological influences, only, of the environment are considered. "All aspects of the child's behavior, play, emotion, speech, expression, are co-determined by the existing environment." Any analysis of environmental factors must be based upon comprehension and presentation in dynamic terms of the total psychological situation. Social facts must be regarded as no less real than physical facts. Objects possess for the child positive or negative attraction, designated as "valence." That these valences possess direction and

strength is shown by a summary (with diagrams) of experiments with psychological field forces. With the young child the opposition of two approximately equal field forces leads to alternation of actions; with the acquisition of self-control this behavior changes to relative calm, while the conflict remains unsolved. "Ability to endure such unresolved conflict situations is an important aim of the education of the will." Particular features of the environment are usually less important than its total character in determining its effect upon development of the child's personality. A change of environment has great significance. A situation which may be termed "circular causal relation" arises between the child and his environment, as when the less intelligent child is led by his failure in a given task to approach the next task with decreased confidence. Pedagogical technique should be directed to the avoidance of this situation.—*M. P. Montgomery* (Faribault, Minn.).

4986. **Line, W.** *The growth of visual perception in children.* *Brit. J. Psychol., Monog. Supp.*, 1931, No. 15.—The visual perception of some fifteen hundred children, aged two and a half to six years, was studied by testing their ability to recognize complex higher order relationships of simple like elements not involving meaning or familiarity, e.g., ratios between lines and angles, differences of colors and brightnesses, etc. The method of card sorting was employed. It was found that the ability to perceive higher order relationships increased both with age and with general intelligence ("g"). Development was progressively selective; at first only intense, massive or moving stimuli were cognized, but later increasingly fine stimuli and minute details could be cognized. Individual unrelated parts were perceived at an earlier stage than were unanalyzable wholes, indicating the priority of the perception of basic fundamentals and absolute qualities to the eduction of relations. Items were recognized as related (i.e., with fundamentals and relation intimately fused) considerably earlier than the judgment was made that they were related. The former stage showed the greater degree of wholeness, and approached the perception of Gestalten, while the latter involved an active, deliberate and abstractive recognition of parts and their mutual relationship. The "as" relationship was more common within substances, and the "that" relationship between substances. The two stages were, however, closely similar and correlated with "g," thus showing that there is no essential difference between simple perception of form and the higher cognitive processes.—*M. D. Vernon* (Cambridge, England).

4987. **Loosli-Usteri, M.** *La conscience du hasard chez l'enfant.* (The consciousness of chance in children.) *Arch. de Psychol.*, 1931, 23, 45-66.—At what age does the child become conscious of the idea of chance? The author incidentally observed during the course of his research on the interpretation of Rorschach's ink blots that certain children around the age of ten years tried to find the significance of the ink blots instead of simply trying to interpret them. Children of that age reacted as if the blots

had been made by the adult not by chance but with a firm intention to represent a certain, definite, predetermined something. In other words, they acted as if the blots were a sort of puzzle for which they had to find the hidden meaning, although they had been given a preliminary, detailed explanation of the method by which the blots had been made, i.e., spurring some ink on a piece of paper which was afterwards folded. It thus seemed that the children were not aware of the fact that the forms of the blots had been caused by chance. Then the author thought of having the children themselves make the ink blots in order to see if this same phenomenon would appear. He used 17 boys and girls from 7 to 13 years of age, analyzing their behavior and their responses to certain types of questions. No child understood at once that the blots had been produced by chance. All of them consented to make certain forms of blots agreed upon in advance, such as the head of a dog, an elephant, etc., and in spite of their failure the majority of them never recognized during the course of the experiment the impossibility of making blots according to a fixed intention. The author concludes that before the age of 9 years children do not possess any consciousness of chance, that from 10 to 12 years of age there is a more or less vague consciousness of this phenomenon, and that at 13 years of age the reflection of the child is far enough advanced to permit an approximate formulation, at least, of the idea of chance. This absence of the consciousness of chance is without doubt a direct function of the development of causal thinking. The fact that this development is made only gradually is not at all astonishing, since it is a matter of the child's abandoning his egocentricity and his infantile world in order to be able to recognize the fact that the real world does not correspond to the image which he has formed of it. It is also at this moment that doubt and criticism come into play. However, this negation of chance is not peculiar to the child. In every adult, whether educated or not, there are to be found one or more fields of thought from which he has excluded chance, recourse being made to magic forces which may be of either a revealed or a justiciary character. If the author seems to have obtained only explanations of a purely physical nature on the part of the children, this fact is probably due to the methods used.—*M. R. Lambercier* (Geneva).

4988. **Lorber, A.** *Das sexuelle Wissen der Grossstadtjugend.* (Sex knowledge among city adolescents.) *Vjsch. f. Jugendk.*, 1931, 1, 121-125.—The author, a teacher of nature study in a boys' high school, sought to find out his pupils' knowledge of sex matters by having them write out in detail what they actually knew, the age at which they obtained the information, and the source. He believes that his material shows accurately the course of sex knowledge among city adolescents, particularly of the poorer classes. According to his statistics, 20% of the children became acquainted with the most intimate facts of sex life at the age of about 6 or 7 years, and another 25% toward the end of the elementary-school period. The remainder of the boys had more or less hazy ideas on the subject. The source of the

information was, in the majority of the cases, other children, supplemented by reading, observation, and overhearing conversations. The author relates the attainment of sex knowledge to school entrance and the behavior characteristics of the *Trotzalter*. He emphasizes that parents and teachers should face the facts and free the child's idea of sex of its grossly materialistic character.—*M. E. Morse* (Catonsville, Md.).

4989. **Marshall, H.** *Children's plays, games, and amusements.* In *A Handbook of Child Psychology*. Worcester, Mass.: Clark Univ. Press, 1931, 515-526.—The studies which have been made of play activities afford the following conclusions: (1) Play life is strikingly independent of temporal or racial barriers. (2) Older children become slightly less social and engage in a smaller number of activities than younger children. (3) The gifted child shows the same play interests except for greater maturity, and more interest in games requiring thinking. (4) There are sex differences, probably partly due to training and partly inherent. (5) Older rural children are less mature in play interests than are urban children. (6) The negro child tends to more social games than the white child. Both city and country have problems to meet in providing ideal conditions for participation in the muscular and intellectual activities which constitute a valuable play life; the city because of limited space; the country in lack of playmates and opportunities to play.—*M. P. Montgomery* (Faribault, Minn.).

4990. **McCarthy, D.** *Language development.* In *A Handbook of Child Psychology*. Worcester, Mass.: Clark Univ. Press, 1931, 278-315.—A discussion of the normal development of oral language during the preschool period, beginning with the birth-cry. The important babbling stage, on which information is meager, deserves closer study. The vowel sounds, beginning with *a*, appear first; then *m*, *p*, and *b*, followed in order by gutturals, dentals and nasals. It is probable that the child selects through use, from a wide variety of sounds which he is able to make, those which are contained in his mother tongue. The child understands words of others some time before he can use them. The first word is usually a reduplicated monosyllable designating a familiar object or person. This occurs at about 10-12 months. Next comes the single word sentence, at about 18 months, followed rapidly by word combinations. Speech may be described as egocentric or socialized, the former type of response decreasing in frequency with age. Girls exceed boys slightly in rate of speech development. Rate of linguistic development has a positive relation to socio-economic status, and a very definite relation to general intelligence. It is accelerated by association with adults. These relations do not disappear with age. The average vocabulary at age 4½ contains 2000 words, including all parts of speech and inflections. The bibliography contains 148 references.—*M. P. Montgomery* (Faribault, Minn.).

4991. **McElwee, E. W.** *A study of truants and retardation.* *J. Juv. Res.*, 1931, 15, 209-214.—110

children in a river-front district in New York who were given court hearings because of truancy are the subjects of the study. Nearly half belonged to the border-line group in intelligence. The median amount of school retardation of the truant was 2 terms. His reading attainment tended to be 3 terms below that of the average child in his grade; but considering the former's M. A., the author found him reading material 2 terms in advance of that which could justly have been expected of him.—*H. L. Koch* (Chicago).

4992. **Mead, M.** *The primitive child.* In *A Handbook of Child Psychology*. Worcester, Mass.: Clark Univ. Press, 1931, 669-687.—Study of children in primitive society presents valuable data on social psychology just to the extent to which the problem under investigation is one of the effect of social environment. Primitive children should be regarded primarily as subjects in an already constructed control culture. The simplicity and homogeneity of primitive societies make possible the presumption that one child in a community has the same common ancestry as another, and training in a common tradition. These small, untouched societies are rapidly being invaded and missionized, and what work is to be done must be done within the next 25 years. The wide variety of investigations which offer possibilities of research includes problems of infant care, developmental stages, educational methods, emotional development, child thought and dreams, language and art. Suggestions are offered for planning research and for the preparation required.—*M. P. Montgomery* (Faribault, Minn.).

4993. **Meili, R.** *Les perceptions des enfants et la psychologie de la Gestalt.* (The perceptions of children and Gestalt psychology.) *Arch. de Psychol.*, 1931, 23, 25-44.—The fundamental problem of perception in children seems to consist in the fact that sometimes children's perceptions appear vague and confused (syncretism), and sometimes they seem to reveal an analysis which is foreign to the adult. This conclusion is the result obtained by the author from his analysis of a group of researches which showed either a syncretic vision (Segers, Volkelt, Köhler, and others) or a vision dealing with details, as in descriptions of pictures (Binet and Simon), continuation of designs (Rupp), and recognition of incomplete pictures (Heilbronner, Van der Torren, and Schöber). He endeavors to make these two possible modes of perception depend upon objective conditions of vision. If the significance of syncretism is limited to the "difficulty in seeing details," then analytic perception is found to be its opposite; that is to say, under certain conditions the child experiences genuine difficulty in seeing the whole and sees, rather, a juxtaposition of details or at least wholes which are more restricted. In the present actual condition of our knowledge we are forced to explain perception in the child by the characteristics found in adult perception. These characteristics are given us in the theory of the Gestalt, where the fundamental psychological fact is that of the whole. In other words, the theory emphasizes the general fact that the different parts have a relation one to another.



This fact can be considered under two aspects: (1) form (Gestalt), which is its conscious, phenomenal side, and (2) structure, which is the characteristic fashion in which the different parts of the whole are linked to one another. The form may be simple or complex, and certain intellectual factors may play a rôle. The structure, likewise, may be simple or complex, but it is, furthermore, either strong or weak according to whether the parts are determined primarily by the whole or are relatively independent. The whole may be itself either novel or already known, and here we find the intervention of certain factors such as experience and exercise, factors which are denied by certain writers and affirmed by others. Having been given these characteristics, we can say that the child sees a whole in a syncretic fashion when the form is simple and its structure is strong but not very complex, while he sees in an analytic fashion (1) when the whole (as it is understood by the adult) has no significance for him although the details do have significance, and (2) when the structure of the whole is too complicated or too weak. Thus, results from different authors which appear contradictory can be explained. The author then suggests the hypothesis that if the wholes which the children see are more primitive and simpler than those seen by the adults and if they perceive sometimes by means of decomposition and sometimes by syncretic vision, the reason may be that the child has a much greater facility than has the adult for forming wholes independent of topography, provided that the parts are somewhat related to each other and do not differ too much qualitatively. In the child there takes place more easily a modification of objective data under the influence of the whole. Objects which constitute for the adult a strong though not too complicated structure will call forth syncretic vision in the child. If the data contain more independent parts (a structure which is weak for the adult), the internal structure of each of these parts will become relatively stronger for the child than for the adult, and the weaker bonds which still exist for the latter will disappear for the former, i.e., the child will have analytic vision. This difference between adult perception and that of the child may arise from a structural difference in the nervous system, which, however, still remains to be discovered. This discovery would give a solid basis to the hypothesis. It will be necessary to have new experiments in order to demonstrate whether this hypothesis is sufficient or whether other factors must intervene, such as egocentrism, affectivity, and interest.—*M. R. Lambercier* (Geneva).

4994. Muggia, A. *La paura nei bambini*. (Fear in children.) *Ig. e vita*, 1931, 14, 139-140.—The author briefly indicates the most frequent forms of children's anxiety states (e. g., pavor nocturnus) and presents the opinion that childish fears arise chiefly from irrational education. The author presents an efficient prophylaxis against these often severe disturbances.—*A. Angyal* (Turin).

4995. Murchison, C. [Ed.] *A handbook of child psychology*. Worcester, Mass.: Clark Univ. Press, 1931. Pp. xii + 711. \$5.00.—In this book there is

assembled for the first time a volume of information covering the entire field of child psychology, each phase presented by a specialist, and the whole covering completely the range of knowledge currently available, the problems to be solved, and the methods employed in attacking them. "It is believed that a proper and systematic presentation of the problems of child psychology, presented as problems experimentally investigated, will demonstrate a field of scientific research surprisingly full of accomplishment and of promise even to some of the experts in the field itself."—*M. P. Montgomery* (Faribault, Minn.).

4996. Niggli-Hürlimann, B. *Anthropologische Untersuchungen in Züricher Kindergärten mit Berücksichtigung der sozialen Schichtung*. (Anthropologic studies in Swiss kindergartens, with emphasis on social cleavage.) *Anthrop. instit. d. Univ. Zürich*, 1930. Pp. 215.—(Bibliographia Eugenica).

4997. Ohmsted, G. *Einfluss des Alters und der Altersunterschiede der Eltern sowie der Anzahl und Aufeinanderfolge der Geburten auf die geistige und körperliche Minderwertigkeit der Kinder*. (Influence of age and difference in age of the parents as well as of the number and order of births on the mental and physical incompetency of children.) *Monatssch. f. Kinderhk.*, 1931, 49, 96-130.—(Bibliographia Eugenica).

4998. Peterson, J. *Learning in children*. In *A Handbook of Child Psychology*. Worcester, Mass.: Clark Univ. Press, 1931, 316-376.—A survey is presented (with tables and graphs) of experiments relating to the effect upon learning of maturity, undistributed and distributed practice, instruction, transference, associative learning, and the making of generalizations. Inferences concerning the relation of learning rate to general intelligence are inconclusive. One of the great problems with children is the difficulty of controlling motivation, the most important condition in learning. Children show much similarity to adults in acquiring motor coordinations and skills, less caution in maze and multiple choice problems, and less transference. The difference is less one of experience and maturity than of mental age level, but present evidence also indicates marked maturity effects in the development of early coordinations. There is no period of sudden growth of learning. The bibliography contains 91 titles.—*M. P. Montgomery* (Faribault, Minn.).

4999. Piaget, J. *Children's philosophies*. In *A Handbook of Child Psychology*. Worcester, Mass.: Clark Univ. Press, 1931, 377-391.—Three aspects of "child ideas" noted as constant tendencies are realism, animism, and artificialism. Realism is shown in the confusion of psychic and physical, of inner and outer things, of perspective and real movements. Animism is apparent in the tendency to consider things living and conscious which results from lack of differentiation between psychic and physical. The explanation of origin offers two stages of development: artificialist, or theological, up to age 7 or 8, then the stage of "causality by generation" where things derive from each other. This is followed by progressive rationalization. These concep-

tions are all clearly evident in the answers given by children to questions regarding thought, dreams, the sun, clouds and wind, and the origin and meaning of life.—*M. P. Montgomery* (Faribault, Minn.).

5000. Seagoe, M. V. The child's reaction to the movies. *J. Juv. Res.*, 1931, 15, 169-180.—The study is one based upon the returns from a rather detailed questionnaire filled out by 800 Los Angeles school children in grades 1-8. 61% of the children assert they attend the movies once a week or oftener. Films that have rapid action and excitement, that stimulate laughter, and that teach something seem to be preferred. The primary appeal of the movie appears to be emotional rather than intellectual, the alleged influence upon the pattern of the child's conduct being considerable. More of the boys than of the girls and more of the behavior-problem group than of the non-offenders attend shows unchaperoned. About two-thirds of the children say they are chaperoned by adults, the percentage decreasing as the children increase in age.—*H. L. Koch* (Chicago).

5001. Serin, —. Dépistage des troubles médico-psychiques dans les jardins d'enfants des habitations à bon marché de la ville de Paris. (Detection of the medico-psychological troubles in the kindergartens belonging to the tenements of Paris.) *Ann. méd.-psychol.*, 1931, 89, 168-170.—An investigation of young children from three to six years of age, who live in cheap dwellings and go to the kindergartens, showed troubles mainly due to heredity. Out of 517 children, 85 were mentally retarded; 73 had character troubles, such as being impulsive, violent, apathetic, or mythomantic.—*M. B. Mitchell* (George School, Pa.).

5002. Snyder, M. A. A comparison of mental traits and attitudes of delinquent boys and girls. *J. Juv. Res.*, 1931, 15, 181-191.—One hundred consecutive cases each of boys and girls admitted to the Pennsylvania Training School were studied. Both sexes tended to be below average mentally, to have an educational age in excess of their mental age, to score higher than average on the Woodworth-Mathews Data Sheet, to profess fear decreasingly with increase in age, to assert the influence of others as the strongest motive for their delinquency, and to have relatively low vocational aims. The girls, as contrasted with the boys, showed a slightly higher emotional instability as well as a greater tendency to dream, to feel misunderstood, and to fear fires. About 78% of the girls were committed for sexual immorality. They tended to blame bad home conditions for their delinquency. The boys, as compared with the girls, tended to complain more of food and of physical ailments, to assert more frequently that they feel they have been wicked, and to blame the influence of others more for their delinquency. Offenses against property were the most frequent cause of commitment among the boys. The majority of girls desired work of a domestic nature, whereas the boys were inclined to express an interest in the semi-skilled trades.—*H. L. Koch* (Chicago).

5003. Terman, L. M. The gifted child. In *A Handbook of Child Psychology*. Worcester, Mass.:

Clark Univ. Press, 1931, 568-584.—There are two classes of gifted children; the intellectually gifted and the specifically talented. Less is known of the second type. "Without superior general intelligence special ability in music and art inevitably falls short of really great achievement." For purposes of study a line arbitrarily drawn at 130-140 IQ includes about 1% of the school population in the class of "gifted." These children are found to be superior physically; accelerated in school progress by 14% of the age of the child; to have more hobbies than average; to rate high in intellectual and in social interests, in character development, emotional stability, leadership, and social adaptability. Follow-up studies show that these gifted do not deteriorate as they approach adult life. The possibilities of many are not realized because of unfavorable environment and particularly because of the failure of education to adapt itself to them. Although the average gifted child is much retarded, extra promotions do not solve the problem. These individuals are so different from children of 110-115 IQ as to require different training. In the forty cities which have established special classes for superior children results have been most satisfactory; no valid objection has been found, and no such classes have been abandoned.—*M. P. Montgomery* (Faribault, Minn.).

5004. Todd, T. W. Growth—the gipsy. Cleveland, Ohio: Brush Foundation, 1929. Pp. 7.—(Bibliographia Eugenica).

5005. Tumlriz, O. Kinderaussagen in einem Ehrenbeleidigungsprozess. (Children's testimony in a libel suit.) *Vjsch. f. Jugendk.*, 1931, 1, 126-132.—The author describes a libel suit which was decided on the testimony of 8- to 11-year-old children. He concludes that children are unreliable witnesses. They are extraordinarily suggestible; and, although they observe accurately, they take in only what interests them and remember only the things which make an emotional impression. Their attention is fleeting and easily diverted. They cannot grasp psychological and abstract relationships, and, finally, they are often coached or threatened by interested adults. The author recommends that other German states follow the example of Saxony, which requires that in all legal proceedings in which children appear as witnesses, a psychologist shall be called in.—*M. E. Morse* (Catonsville, Md.).

5006. Wallon, H. Les origines du caractère chez l'enfant. (The origin of character in the child.) *Rev. cours et conf.*, 1930, 31, 208-219; p. 397; 529-547; 702-713; 32, 124-140; 340-353; 549-561.—An account of a course given at the Sorbonne consisting of two main divisions. The first was devoted to a study of affective states in relation to the question of character. It dealt with the functional behavior of nurslings, the emotional behavior, and the place of emotion in their behavior. The second part was concerned with the sources and forms of emotion in children. A very complete study of the theories relating to the formation of character preceded the first division. No bibliography.—*Math. H. Piéron* (Sorbonne).

5007. Wellman, B. L. **Physical growth and motor development and their relation to mental development in children.** In *A Handbook of Child Psychology*. Worcester, Mass.: Clark Univ. Press, 1931, 242-277.—This study presents a synopsis of reports on anthropometric measurements of children, including norms and variations of height and weight, breathing capacity, head diameters and circumference, strength of arms and back, area of carpal bones, hip and shoulder widths, and arm span. There is no index of total growth comparable to mental age, which would need to be based upon maturation, physical size and fitness. Norms have been worked out for motor development but are not applicable over a wide age range. Sex differences favor boys in some physical achievement tests. There is a positive relationship between the amount of activity a child engages in on play apparatus and his ability at certain motor tasks. There is an optimum time for practice in any skill. In studying the relation of physical, mental and motor development it is found that the lack of an index of physical maturity makes comparison difficult. No relation is found between intelligence and physiological maturity as measured by ossification of the carpal bones, chronological age considered. Motor development has a slight positive relation to intellectual development. There is need for more adequate technique in the control of testing conditions. A bibliography of 127 references is appended.—*M. P. Montgomery* (Faribault, Minn.).

5008. Wiedling, H. **Wille und Willenserziehung beim Kinde und beim Jugendlichen.** (The will and its training in childhood and youth.) *Vjsch. f. Jugendlk.*, 1931, 1, 106-116.—A theoretical discussion. The education of the child for social living depends to a great extent on the formation of the will. Like other natural functions, the will undergoes a process of evolution. The author recognizes three stages: motivation (sense stimulus); *Einstellung*, making up one's mind; and the actual doing (objective—*gegenständliches Moment*). The central factor in the child's will is motivation, which controls not only the subjective processes but also the objective performance. The author distinguishes also two types of will: the integrated (reflex), and the un-integrated (where differentiation has taken place and there is a conflict of motives). The child's will is integrated, the adult's un-integrated. It is un-psychological to deny or to stifle through "education" the instinctive type of will in the child. Strict prohibitions and commands mistake absolutely the structure and motivation of the child's will. Through appropriate choice of experiences it must be guided in the development of human values. The child has a very hazy and fluctuating sense of values. In youth values are perceived for the first time, and the instinctive reflex conduct of the child develops into the emotionally toned ethical behavior of the adult. The training of the child's will lays the foundation of all ethics. In measure with this developing consciousness of values, an independent personality emerges. In this "century of the child" correct methods for the cultivation of the social personality

are being worked out, thanks to the development of psychology and the study of adolescence. Only persons who have knowledge of elementary motives and ethical values should be chosen as educators, and parents need a general psychological training.—*M. E. Morse* (Catonsville, Md.).

5009. Woolley, H. T. **Eating, sleeping, and elimination.** In *A Handbook of Child Psychology*. Worcester, Mass.: Clark Univ. Press, 1931, 28-70.—This study explains the psychological basis for the methods of training and the special techniques which the consensus of present opinion regards as best adapted to establishing in the child desirable habits of eating, sleeping and elimination, and the control of nervous habits.—*M. P. Montgomery* (Faribault, Minn.).

[See also abstracts 4683, 4685, 4695, 4701, 4802, 4805, 4808, 4893, 4900, 4944, 4953, 5019.]

## EDUCATIONAL PSYCHOLOGY

5010. [Anon.] **Report of the consultative committee on the primary school.** London: H. M. Stationery Office, 1931. Pp. xxix + 289. 2/6.—The terms of reference of this committee, formed by the English Board of Education, were: "To inquire and report as to the courses of study suitable for children in infants' departments up to the age of 11 in elementary schools, with special reference to the needs of children in rural areas." A great amount of information, historical, descriptive and critical, is included in the report, which gives a picture of the state of affairs as regards the official education of young children in contemporary England, and makes a number of recommendations. The psychological parts of the report are in the main the work of H. A. Harris and Cyril Burt.—*F. C. Bartlett* (Cambridge, England).

5011. Atkinson, C. **The effect of sex differences in the study of general science.** *J. Educ. Res.*, 1931, 24, 61-66.—Students in one of the Pasadena junior high schools were given 8 tests of 50 questions each of the true-false type at two-week intervals. The boys show a slight superiority over the girls—57% of the boys equaled or exceeded the median of the girls. A Terman Group Test indicates that the girls are slightly superior in intelligence, and this strengthens the superiority of the boys in general science.—*S. W. Fernberger* (Pennsylvania).

5012. Barker, M. **Utilisation du milieu géographique.** (Utilization of geographic environment.) Paris: Flammarion. Pp. 250. 12 fr.—It has become banal to point out how many subjects offered to students are divorced from life and to what extent they are divorced from one another. The method of utilizing geographic environment is applied to the correction of this double error. It is not so much a new method as an established order in the curriculum, of an assured correlation between the different topics studied, everything coming from explorations and experiences of the children themselves in the environment with which they are familiar. It is the initiation to scientific and literary



culture by the study of the sun, climate, flora, fauna, agricultural activity both commercial and industrial, history, and folk lore. Such are the characteristics and the scope of the method, the essentials of which are of French origin, but which has had to seek its fulfillment in other countries, particularly in England, whence it returns to France under the name "survey."—*Math. H. Piéron* (Sorbonne).

5013. **Bezard, —. Le surmenage scolaire.** (School overwork.) *Psychol. et vie*, 1931, 5, 143-146.—*Math. H. Piéron* (Sorbonne).

5014. **Borgeson, F. C. All-school activities.** New York: Barnes, 1931. Pp. v+143. \$1.00.—This book contains a report of a survey made by the author in an attempt to discover the prevailing practice in elementary schools with regard to extra-curricular activities. It aims to encourage such use of activities in the teaching program as shall preclude traditional methods which have a deadening effect upon young minds, or give rise to unfavorable attitudes toward the school. The author advocates provision for pupil experiences in which assuming responsibility, making decisions, directing activities, and securing pleasure by the children themselves shall hold a prominent place. Such a program gives opportunity for special pupil interests and abilities to be revealed and cultivated, and also provides for desirable character development.—*E. V. Brill* (Malone, N. Y.).

5015. **Borgeson, F. C. Group-interest activities.** New York: Barnes, 1931. Pp. v+123. \$1.00.—As the preceding volume, *All-School Activities*, dealt with those activities which involve a whole school, this volume deals with such as have special group interest. A report of the survey made by the author shows that this type of program is not in general use in elementary schools. Its value is stressed and concrete suggestions offered to the teacher-leader. Several quotations from reports received during the survey provide definite aid to all who are interested in introducing such activities as an aid in securing the finest objectives in elementary school work.—*E. V. Brill* (Malone, N. Y.).

5016. **Brewer, J. M. Self-measuring scale for achievement and experience in work and education.** Chicago: Stoelting, 1931.—A scale designed to aid the student in diagnosing the adequacy of his preparation for his educational and vocational future. Comprises a check-list of various types of experience—agricultural, commercial, industrial, professional, home-making, and other forms of activity.—*L. A. Averill* (Worcester State Normal School).

5017. **Brewer, J. M., & Lincoln, M. E. Educational information test.** Chicago: Stoelting, 1931.—A test designed to help the high school student to check up his understanding of the opportunities provided by his school, to understand the relationship between education and work, and to plan intelligently for his educational and vocational future.—*L. A. Averill* (Worcester State Normal School).

5018. **Brewer, J. M., & Lincoln, M. E. Vocational information test.** Chicago: Stoelting, 1931.—Comprises a survey of various occupations, types of

workers, and qualities needed in one who desires to be successful in the vocation he may choose.—*L. A. Averill* (Worcester State Normal School).

5019. **Brownell, W. A., & Stretch, L. B. The effect of unfamiliar settings on problem-solving.** *Duke Univ. Res. Stud. Educ.*, 1931, No. 1. Pp. 86.—An investigation undertaken to determine whether "children's success in solving arithmetic problems is in any way conditioned by the familiarity or lack of familiarity in the settings described in the problems." The results indicate that problems are not made unduly difficult by unfamiliar settings except under certain circumstances, which are: "numerical relationships of an intermediate degree of difficulty, number of times a given set of operations has been met, and limitations as to time."—*D. Shakow* (Worcester State Hospital).

5020. **Cason, H. The essay examination and the new type test.** *School & Soc.*, 1931, 34, 413-418.—The author argues the case of the essay examination and presents the following opinions: "(1) The new type test is not a valid or reliable measure of a student's knowledge and ability in psychology. (2) The influence of the new type test on psychology students is undesirable. (3) Some form of the essay examination is the most valuable and practical type of written examination to use with both undergraduate and graduate students in psychology."—*H. L. Koch* (Chicago).

5021. **Cederstrom, J. A. The influence of a secondary course in zoology upon gains in college zoology.** *J. Educ. Res.*, 1931, 24, 57-61.—A study of five large classes in zoology at the University of Minnesota, 62 of the members of which had had zoology in high school, while 352 had had no previous zoology. Information tests were given three times during the course. The results show that "students who have had a previous elementary course in zoology in high school have a pronounced lead over the others at the beginning of the course, but that as the college course progresses this lead is reduced."—*S. W. Fernberger* (Pennsylvania).

5022. **Childs, J. L. Education and the philosophy of experimentalism.** New York: Century, 1931. Pp. xix+264. \$2.00.—The book is indicated by Kilpatrick as "the most inclusive and thoroughgoing single study of the philosophy of education published in this country since Dewey's *Democracy and Education*." It is a critical, yet constructive examination of the philosophical and educational ideas of Pierce, James and Dewey. The ideas of all three philosophers are expressed by the single term *experimentalism*. Childs traces the development of experimentalism from its European beginning, through American life, to the present day. He accepts the main position of experimentalism, but he examines various other positions, including a denial that the rank and file of people are responsible beings who can think for themselves and take part in community life intelligently, a too narrow S-R bond theory, and "conditioning" as the chief factor in learning. In a constructive way he points out how these positions may be corrected in the light of the

philosophy of experimentalism. No specific rules are given to be directly applied to school procedure, but terms are offered in which to think while standards and solutions for our problems are evolving from the educative process. In conclusion he states that experimentalism has no final form of system, but its principles are "instruments for further discovery" which aid the "educator who would be an intelligent student of his task."—*R. M. White* (Worcester, Mass.).

5023. **Clark, J.** Education at the college level for marriage, parenthood and family life. *J. Amer. Asso. Univ. Women*, 1931, 24, 132-135.—(Bibliographia Eugenica).

5024. **Didier, J.** Y a-t-il un surmenage scolaire? (Is there scholastic overwork?) *Psychol. et vie*, 1931, 5, 146-148.—*Math. H. Piéron* (Sorbonne).

5025. **Dugas, L.** Surmenage et malmenage. (Overwork and mismanagement.) *Psychol. et vie*, 1931, 5, 149-150.—*Math. H. Piéron* (Sorbonne).

5026. **Duthil, R.** Comment vaincre le surmenage scolaire. (How to overcome scholastic overwork.) *Psychol. et vie*, 1931, 5, 141-143.—The art of teaching and of educating must rest upon the respect of the child. There is overwork because we oblige the child to give himself over to a mode of activity which corresponds neither to his needs nor to his aptitudes, and to work at a rhythm where no account is taken of individual differences.—*Math. H. Piéron* (Sorbonne).

5027. **Fontègne, J.** Enseignement professionnel et surmenage. (Occupational teaching and overwork.) *Psychol. et vie*, 1931, 5, 137-139.—There can be no overwork in the teaching of vocations, because the teaching is conditioned by the aptitudes of the child, because the center of the teaching is not removed from the preoccupations of the pupils, and finally, because the teaching, in the larger sense of the word, is done by the active method.—*Math. H. Piéron* (Sorbonne).

5028. **Fowler, H. L.** Induction or deduction? An experimental investigation in the psychology of teaching. Melbourne: Melbourne Univ. Press, & Macmillan, 1931. Pp. 84. 3/.—The book reports an investigation to discover what is the most economical method of presenting new material to children and to discover the best way of developing the rules which were to be applied. (The word "rule" is used to represent general relationships, "laws," or concepts.) Tests were given to 500 London children ranging in age from 10 years, 4 months, to 10 years, 11 months, and the methods used in the six groups in which the children were placed are as follows: (1a) inductive method without prevention of errors; (1b) inductive method with prevention of errors for a certain period; (2a) deductive method without prevention of errors; (2b) deductive method with prevention of errors for a certain period; (3a) deductive method with reference to particulars, but without prevention of errors; (3b) deductive method with reference to particulars, and with prevention of errors for a certain period. The tests were in the form of diagrams which had a specific rule back of

the arrangement of the figures, which the children were to find out and formulate in words, and their ability to formulate the rule correctly showed the clarity of the concept in their thought. About the same results were obtained from tests of the forming of grammatical concepts as were obtained from the tests of artificial concepts. "The results of the whole series of experiments have shown that the deductive method of teaching where there is explanation of the relation to be taught, and immediate reference to particular cases, is much better than the inductive one."—*R. White* (Worcester, Mass.).

5029. **Fretwell, E. K.** Extra-curricular activities in secondary schools. Boston: Houghton Mifflin, 1931. Pp. xix + 552. \$2.75.—Two theses are fundamental to this treatise: (1) The school should organize the whole situation so there is opportunity for teachers as well as pupils to practice qualities of good citizenship with satisfying results while practicing them. (2) Extra-curricular activities should grow out of curricular activities and return to enrich them. Material for the book was brought together through cooperation of teachers and administrators as graduate students and the author as instructor in a course in extra-curricular activities in secondary schools. Chapter headings are: the home-room; class organization; pupil participation in government; types of councils; how one school grew a student council; analysis of senior high school councils; the council at work; the assembly; clubs; the high-school newspaper; the pupil's handbook; the high-school magazine; the annual; commencement; athletics; extra-curricular finances. A set of study questions and an ample list of references are provided for each chapter.—*M. O. Wilson* (Oklahoma).

5030. **Good, C. V.** Fields and types of research in education, 1918-1931. *J. Educ. Res.*, 1931, 24, 33-43.—Statistical study of the kinds of research articles which have appeared during this period in the form of graduate theses, monographs, books and periodical articles.—*S. W. Fernberger* (Pennsylvania).

5031. **Hanske, C. F.** Sex differences in high-school chemistry. *J. Educ. Res.*, 1931, 23, 412-416.—A study of 125 boys and 105 girls in chemistry in the Emerich Manual Training High School, Indianapolis. The results of a Terman Group Test of Mental Ability give similar scores for the two groups. The boys were five months older than the girls on the average. At the middle of the year and at the end of the course the subjects were given the Rich Chemistry Tests (Gamma and Epsilon) and an improvised inventory test. Before the course in chemistry the boys had the advantage of more extensive training in other sciences. "In 15 of the 18 tests the boys were found to be superior to the girls. In two tests, and possibly in six others, the differences were found to be statistically significant."—*S. W. Fernberger* (Pennsylvania).

5032. **Hartmann, G. W.** Economy of time in college instruction. *J. Educ. Res.*, 1931, 23, 404-409.—A study of the effect of differences in teaching time upon student ability in an academic subject. Several

sections of two courses in psychology were studied at Pennsylvania State College. One group of sections met only 67% as often as the other. The group meeting fewer times were encouraged to wider reading in their subject. Achievement tests were given to the sections before and after the experiment. No statistically significant differences were detectable. "Self-education under ordinary conditions appears to yield results just as satisfactory as those obtained by added classroom instruction."—*S. W. Fernberger* (Pennsylvania).

5033. **Hawks, L. J.** Certain relationships between scholarship in high school and in college. *Johns Hopkins Univ. Stud. Educ.*, 1931, No. 15. Pp. 58.—In an attempt to answer the questions of relationships between specific high school course grades, combinations of grades in the four-year course, and grades in the last three years of the high school course, the author studied grades of entrants to Johns Hopkins University in 1924, 1925, and 1926, Gettysburg College in 1926 and Vanderbilt in 1927. The necessity of evaluating the high school passing grade gave rise to the development of a new technique for raising the coefficient of correlation. This was accomplished by comparing the elements in the scatter graphs and changing passing grades to raise the coefficient of correlation. This raised coefficients, for example, from .637 to .766, .623 to .716, .528 to .637, and .370 to .693. Analyses for results based on this procedure show that the correlation between high school course grades and first semester and first year scholarship in college may be represented by a coefficient of .60. The average of high school grades correlated with the same factors to the extent of about .70. A single average of three subjects in high school gives a coefficient similar to the average secured by the entire high school grade. The slight improvement gained by the use of regression equations as against simple averages argues for the use of the simpler method. Apparently there is no choice among high school subjects for the prediction of college success. Non-academic subjects do not correlate with college achievement. The four-year high school record is slightly better than the present last-three-year record for such prediction. The author feels that college admission administrators can greatly improve their selection technique by the use of the procedure used in evaluating the high school type on the basis of adjusted passing grades. A brief review of former studies is given with a brief list of references and bibliography. The appendix gives a similar brief study for the Johns Hopkins School of Engineering.—*R. A. Brotemarkle* (Pennsylvania).

5034. **Hurd, A. W.** Does remedial instruction pay? *School & Soc.*, 1931, 34, 467-468.—Six days of additional instruction of a remedial sort on a fourteen-day work unit in physics materially raised accomplishment in that unit. The study involved 1423 pupils in 34 schools.—*H. L. Koch* (Chicago).

5035. **Isaacs, S.** The experimental construction of an environment optimal for mental growth. In *A Handbook of Child Psychology*. Worcester, Mass.: Clark Univ. Press, 1931, 128-157.—A de-

scription of a school whose purpose was "to create for the daily life of a group of young children such an environment as would enable them to mobilize their intelligence in everyday experience to the fullest extent." The school (Cambridge, England) included from 10 to 22 children, ages 2-8, IQ 114-166. The period reported is 3 years and 1 term. The fundamental principle of organization was free activity, with abundance of environmental opportunity, both physical and psychical, for the child to become acquainted with the real world and to adapt himself to it. Although academic learning was not stressed, these children had no difficulty in maintaining their position when transferred to schools of the regulation type, and were characterized as "adaptable" and "eager to learn."—*M. P. Montgomery* (Fari-bault, Minn.).

5036. **Mangun, V. L.** Comparative data from a sampling of liberal arts students in New Hampshire, Tennessee and Alabama. *School & Soc.*, 1931, 34, 442-444.—Having taught in colleges in New Hampshire, Tennessee and Alabama, the author attempts a comparison of the students in these three states with respect to scholastic acceleration; private-school, summer-school, movie, theatre, dance, and church attendance; standards of life success; ambition to teach; number and kind of hobbies; school subject preferences; employment for financial gain; interest in music; and books read.—*H. L. Koch* (Chicago).

5037. **McCallister, W. J.** The growth of freedom in education: a critical interpretation of some historical views. London: Constable, 1931. Pp. xiii + 589. 30/.—The author gives an account of the notion of freedom, with special reference to its educational applications, as it has been developed by many great or well-known thinkers from Plato to Freud. Freedom in education is ultimately regarded as "the harmonizing of the pupil's self-assertive and submissive tendencies in the light of the highest value affirmed by him to be relevant to the life situation of the moment." The author states how this notion may be applied to educational routine, and discusses some of the main implications of his view. The whole treatment is not only historical and critical, but constructive also.—*F. C. Bartlett* (Cambridge, England).

5038. **Nichols, M. L.** Adaptation of tests in science to differing abilities. *School & Soc.*, 1931, 34, 409-412.—Using materials from a course in physics as examples, the author presents a hypothesis regarding the types of examination questions that confront dull students with difficulties in varying degrees.—*H. L. Koch* (Chicago).

5039. **Pagot, C.** La suppression du surmenage par la complication des programmes. (The suppression of overwork by variety in the program.) *Psychol. et vie*, 1931, 5, 148-149.—*Math. H. Piéron* (Sorbonne).

5040. **Rapeer, L. W.** How the nation may be trained in social thinking by history teachers: a new technique for individual and collective reasoning. *J. Educ. Sociol.*, 1931, 4, No. 5.—Discusses the technique of good thinking, analyzes it, and presents two



applications of it in the solution of history problems.—*L. A. Averill* (Worcester State Normal School).

5041. Remmers, H. H. Some attributes of superior students. *Person. J.*, 1931, 10, 167-178.—A group of 531 "distinguished" Purdue students, constituting approximately the upper 6% of all students in scholarship, were compared by the method of group differences with a random sampling of 300 non-distinguished students. It was found that a student's chances of being distinguished are enhanced in varying amounts by the following factors: (1) having a high standing on entrance tests; (2) being in the schools of agriculture, chemical engineering, or science; (3) being a junior or senior rather than a freshman or sophomore; (4) being younger than the modal age at entrance; (5) being slightly heavier than the average; (6) being less interested in sports than the average student; (7) having a self rating above average on the trait *native capacity*; (8) being rated above average on the Purdue Personnel Rating Scale; (9) being an only child or one of two children in the family; (10) coming from a large, long-term city high school; (11) having a father who is a professional man; (12) having no or few relatives graduating from Purdue University.—(Courtesy *Person. J.*).

5042. Strang, R. Trends in educational personnel research. *Person. J.*, 1931, 10, 179-188.—Trends in research relating to personnel work in educational institutions were studied by analyzing 582 articles published in 10 magazines during the past 10 years. There has been an increase of approximately 200% in the number of research articles in this field from 1920 to 1930. The growing interest in the college field is shown by the fact that in the last five years there were twice as many studies relating to college as to high school personnel work. The methods of collecting data most frequently employed were intelligence tests, teachers' marks, and questionnaires. The favorite statistical methods of treating data were the frequency distribution, coefficient of correlation, mean, median, and standard deviation. The problems studied related primarily to educational guidance, selective admissions, personality traits and general problems of counseling.—(Courtesy *Person. J.*).

5043. Trow, W. C. Educational psychology. Boston: Houghton Mifflin, 1931. Pp. xv + 504. \$2.80.—The recurrent theme of this volume is adjustment. The approach is dynamic. Its main concern is with the normal child in his social environment. It assumes more than an elementary knowledge of psychology, and stresses the experimental approach to the study of behavior. An attempt is made to give fair consideration to different schools of thought, principally in the introduction. Chapters II to IV (89 pages) deal with motivation (instincts and needs), emotion (social as well as physiological approach), and adjustment (with consideration of the psychoanalytic schools). Chapters V and VI (98 pages) deal with intelligence (and tests), and instruments of measurement (including statistical treatment of data). Chapters VII to X (213 pages) deal with sensori-motor learning and manual

skill, associative learning and transfer, rational learning and the scientific method (problem solving), and social learning and character education (including study of traits and types). The last chapter (51 pages) deals with growth. Each chapter is followed by a section of special references. At the end of the book some five to fifteen questions are asked relating to each chapter separately. The bibliography includes about 350 itemized references, mainly of recent date (including 1930). There is a very complete index. Tables and illustrations are taken in the majority of cases from recent experimental studies or from classical experiments of earlier years.—*O. L. Harvey* (Cambridge, Mass.).

5044. Whitney, F. L., & Swanson, C. G. A comparison of the first and second semester progress of primary pupils. *School & Soc.*, 1931, 34, 377-379.—In this study, which is based upon 529 children in grades 1-4, the New Stanford Achievement Test, primary and advanced forms, and the Los Angeles Word Recognition and Primary Reading Tests were the instruments used in appropriate grades to measure progress. The testing was done in September, January, and May. The authors conclude that "on the whole the data point to rather consistent differences in achievement gains in favor of the work of the first semester."—*H. L. Koch* (Chicago).

[See also abstracts 4831, 4835, 4865, 4878, 4962, 4972, 5057.]

## BIOMETRY AND STATISTICS

5045. Carver, H. C. [Ed.] The interdependence of sampling and frequency distribution theory. *Ann. Math. Statist.*, 1931, 2, 82-98.—(*Soc. Sci. Abst. III*: 16467).

5046. Galvani, L. Contributions to the determination of the indices of variability for certain types of distribution. *Metron*, 1931, 9, 3-45.—(*Soc. Sci. Abst. III*: 16460).

5048. Peters, C. C., & Wykes, E. C. Simplified methods for computing regression coefficients and multiple and partial correlations. *J. Educ. Res.*, 1931, 24, 44-52.—A new method for the calculation of partial correlations up to five variables only is given with instructions and work sheets for its use.—*S. W. Fernberger* (Pennsylvania).

5048. Peters, C. C., & Wykes, E. C. Simplified methods for computing regression coefficients and partial and multiple correlations. *J. Educ. Res.*, 1931, 23, 383-394.—A comparison of several methods of computation indicates that the completed-determinants method has the smallest number of processes involved in problems of three variables and that the Doolittle method has the smallest number for more than three variables. A work sheet and directions for this method are given.—*S. W. Fernberger* (Pennsylvania).

5049. Rorty, M. C. Statistics and the scientific method. *J. Amer. Statist. Assn.*, 1931, 26, 1-10.—(*Soc. Sci. Abst. III*: 16440).

5050. Scates, D. E., & Noffsinger, F. R. Estimates in statistical work. *J. Educ. Res.*, 1931, 23, 410-

411.—In combining the test scores of candidates in the Indiana Edison contest the committee was forced by the shortness of time to make extensive use of estimates. A subsequent check-up showed that the results of these estimates were almost identical with what longer calculations would have yielded. In the belief that approximations might be more widely used in statistics, the methods of estimation employed are described.—S. W. Fernberger (Pennsylvania).

5051. Warren, R., & Mendenhall, R. M. The Mendenhall-Warren-Hollerith correlation method. *Columbia Univ. Statist. Bur.*, 1929, Doc. 1, 37.—(*Soc. Sci. Abst.* III: 16485).

5052. Wicksell, S. D. Remarks on regression. *Ann. Math. Statist.*, 1930, 1, 3-13.—(*Soc. Sci. Abst.* III: 16464).

# MENTAL TESTS

5053. Droba, D. D. Czechoslovak psychology of testing. *J. Soc. Psychol.*, 1931, 2, 238-245.—A review of the development of testing in the country mentioned since 1920; the work has been sponsored principally by the Institute for Applied Psychology.—E. B. Newman (Berlin).

5054. Frickx, J. Deuxième contribution à l'étude de la méthode des tests. (Second contribution to the study of methods in tests.) *Brussels: Documents pédotechniques*, 1930, 9, No. 1. Pp. 27.—(*Bibliographia Eugenica*).

5055. Heidbreder, E. Minnesota personal traits rating scales test blank. Chicago: Stoelting, 1931.—A self-rating scale comprising 114 items touching considerable stretches of the emotional, intellectual, and habitual life of the individual.—L. A. Averill (Worcester State Normal School).

5056. Hollingworth, L. S. Special gifts and special deficiencies. In *A Handbook of Child Psychology*. Worcester, Mass.: Clark Univ. Press, 1931, 627-642.—The conception of IQ is based upon the generally accepted belief that there is positive (although imperfect) correlation among various mental functions. Outstanding among the specialized traits which are least coherent with general intelligence are ability in music and in representative drawing. There are others, such as dancing and chess playing. Analysis of musical talent has shown it to be based upon three elements; the acoustic functions, the motor functions, and the intellectual functions. These elements are independent variables, and an individual may rate high in some and low in others; thus musical ability may coexist with mediocre or inferior intelligence. Eminence as a musician, however, requires also other traits which are a function of general intelligence. Representative drawing has been shown to be markedly independent of general intelligence. Talent in either music or drawing ordinarily manifests itself at an early age. The former has been measured more successfully than the latter. Reading and arithmetical ability correlate closely with IQ; spelling less closely, but positively. Mechanical ability is not reliably predictable from IQ. Ability in leadership may be said to have an

"optimum range" of IQ above, but not too far above, the intelligence of the led. "Social intelligence" is probably not a specialized function, but an optimum section of the intelligence curve, combined with favorable personality traits. Mental endowment, either general or special, probably can not be increased by training.—M. P. Montgomery (Fairbault, Minn.).

5057. Jones, E. S. Personnel questionnaire for students entering college. Chicago: Stoelting, 1931.—A check list designed to reveal mental health, skills and deficiencies, principal interests, emotional and social control, opinions and convictions, social and recreational activities, etc., as the young collegian sees himself. Provides also space for general personal and family information.—L. A. Averill (Worcester State Normal School).

5058. Jones, H. E. The pattern of abilities among adult and juvenile defectives. *Univ. Calif. Publ. Psychol.*, 1931, 5, 47-61.—The purpose of this study is to determine the difference between the performance of juvenile and adult delinquents of approximately the same mental age on various sub-tests of the Stanford-Binet intelligence test. Analyses were made of the test blanks of 185 defective children and 271 defective adults. It was found that the following sub-tests are among those which proved to be harder for the adults than for the children of the same mental age: ball and field, drawing diamond, mutilated pictures, and tests of memory span for digits and syllables. Among the sub-tests which proved easier for the adults than for the children were: vocabulary tests, giving differences, counting pennies, naming coins, and comprehension. The experimenter's main conclusion of theoretical significance is that groups which are equivalent in mental age or opportunity to learn may present marked differences in the pattern of sub-test performance.—V. Jones (Clark).

5059. Kappee, M. Measures of musical talent. *Teachers Forum (Blind)*, 1931, 4, 2-7.—"It is apparent difficulties primarily which make desirable—or indeed inevitable—certain differences in general procedure when tests designed for seeing subjects are arranged for braille." Music tests given on phonograph records are most readily adapted for use with the blind, as they may be given to blind subjects individually in exactly the same way in which they are given to anyone else. The writer suggests how printed tests may be modified in braille for use with the blind, and how the results of all music tests for the blind can be more easily tabulated. The Seashore tests were used as typical of the "aptitude" and "phonograph" groups, and the Kwalwasser test was chosen to represent the "achievement" and "printed" groups.—S. D. Robbins (Boston).

5060. Moore, H. A comparison of linguistic and non-linguistic ability. *J. Soc. Psychol.*, 1931, 2, 245-252.—The distinction between "linguistic" and "non-linguistic" appears to be inexact. There are distinct functions but they may both be included in a single test of either type. The results from 25 selected subjects show that a common factor exists in certain portions of a Dearborn group test, Stanford-

Binet, Kohs block test, and the Macquarrie test for mechanical ability.—*E. B. Newman* (Berlin).

5061. **Orangio-Ruiz, V. Intelligenza.** (Intelligence.) *Nuova Italia*, 1931, 2, 121.—The author explains what the expression "Intelligence is the only virtue, the virtue *par excellence*" really signifies. Intelligence has not only great rights, but great duties; it has not only great liberty but heavy chains. The only existing sovereignty is that of intelligence, which means seeing further and looking higher. Intelligence is love; all weakness of love, all lack of discipline, all negligence of duty shows a lack of intelligence. This quality constitutes a weapon which can be very efficacious in the hands of the educator.—*V. D'Agostino* (Turin).

5062. **Ou-Ni-Lin, Mme. Les tests d'intelligence de Binet-Simon révisés en Chine.** (The Binet-Simon intelligence tests revised in China.) *Rev. sci. du trav.*, 1930, 2, 443-461.—The author describes the Chinese revision of the Binet-Simon tests and gives in detail the tests adopted and the results of standardization. She shows the use of an absolute scale graduated in units of standard measures (McCall's T-scale, which permits equal units for all ages). This change allows an easier comparison of intelligence and scholastic attainment, since the T-scale has also been used for the scaling of scholastic attainment.—*Math. H. Piéron* (Sorbonne).

5063. **Simon, T. La mesure de l'intelligence chez les jeunes enfants.** (The measurement of intelligence in young children.) *Paris méd.*, 1930, No. 44, 403-409.—(Bibliographia Eugenia).

5064. **Tinker, M. A. The significance of speed in test response.** *Psychol. Rev.*, 1931, 38, 450-454.—The author concludes, from a survey of the literature on the relation of speed of response to mental ability, that no common factor runs through both motor and mental test responses, but that speed is related to ability in mental and scholastic test responses when speed and ability are measured on the same kind of material. Holding accuracy constant, the time-limit and work-limit methods of test procedure are proved equivalent. Hence either may be employed to determine the presence or absence of a general factor in test performances.—*A. G. Bills* (Chicago).

5065. **Wallin, J. E. W. Attainment scale for clinical use.** Chicago: Stoelting, 1927.—A handy card for the clinician who is attempting to determine with reasonable accuracy the level of intelligence of a child in any grade below the fourth.—*L. A. Averill* (Worcester State Normal School).

5066. **Wires, E. M. Interpretation of reactions to the Pintner-Paterson Performance Scale.** *J. Educ. Res.*, 1931, 24, 53-57.—Results of the examination of 100 patients at the Wayne County Psychopathic Clinic, Detroit, and of 200 patients of the Neuro-Psychiatric Clinic, Harper Hospital, Detroit. The test affords an excellent basis for qualitative analysis of the subjects' approach, method of attack on the problems, and methods of manipulation. A case history is given.—*S. W. Fernberger* (Pennsylvania).

[See also abstract 4701.]



